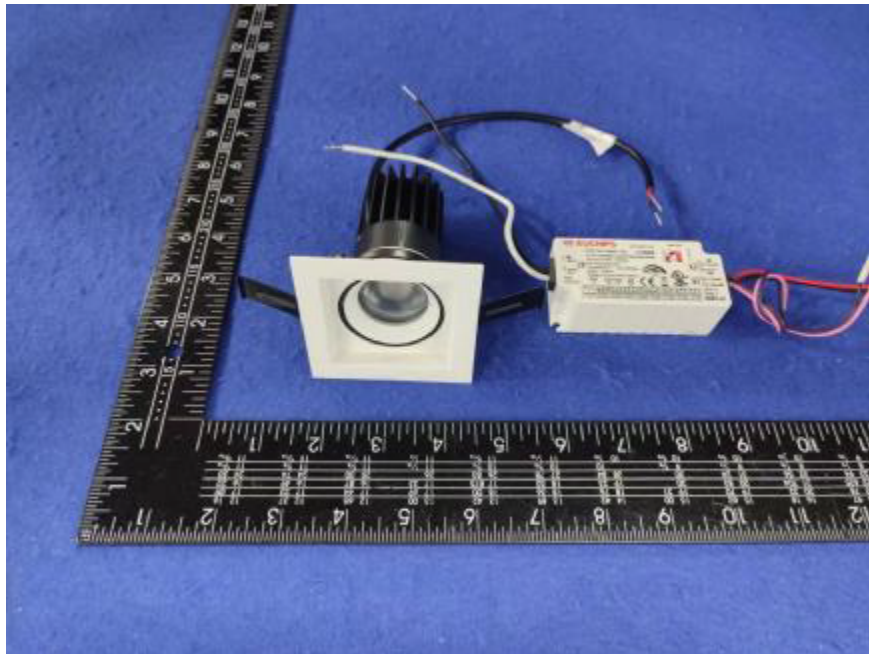


Photometric Report for each Light Engine  
used in double and triple configuration  
for Flanged and Flangeless Trim



Light Output Ratio:	57.5%	
Luminaire Power:	11.27 W	
SHR Nominal:	0.50	Calculated using the TM5
SHR Maximum:	0.70	fine grid method.

C Range: 0 - 360DEG  
C Interval: For a lens beam angle of 36°  
Test Speed: HIGH  
Temperature: 77.54 °F  
Operators: zoe  
Test Date: 2023-12-29

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461  
Humidity: 65.0%  
Test Distance: 124.409" [K=1.0000]  
Remarks: LAMP: BXRV-DR-1830G-100Z-A-23 Ra: 90  
LENS: PM-1103B 36R+DIFFUSER  
DRIVER: PUP10A-1WMC-700 500mA  
30minutes warm-up

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM

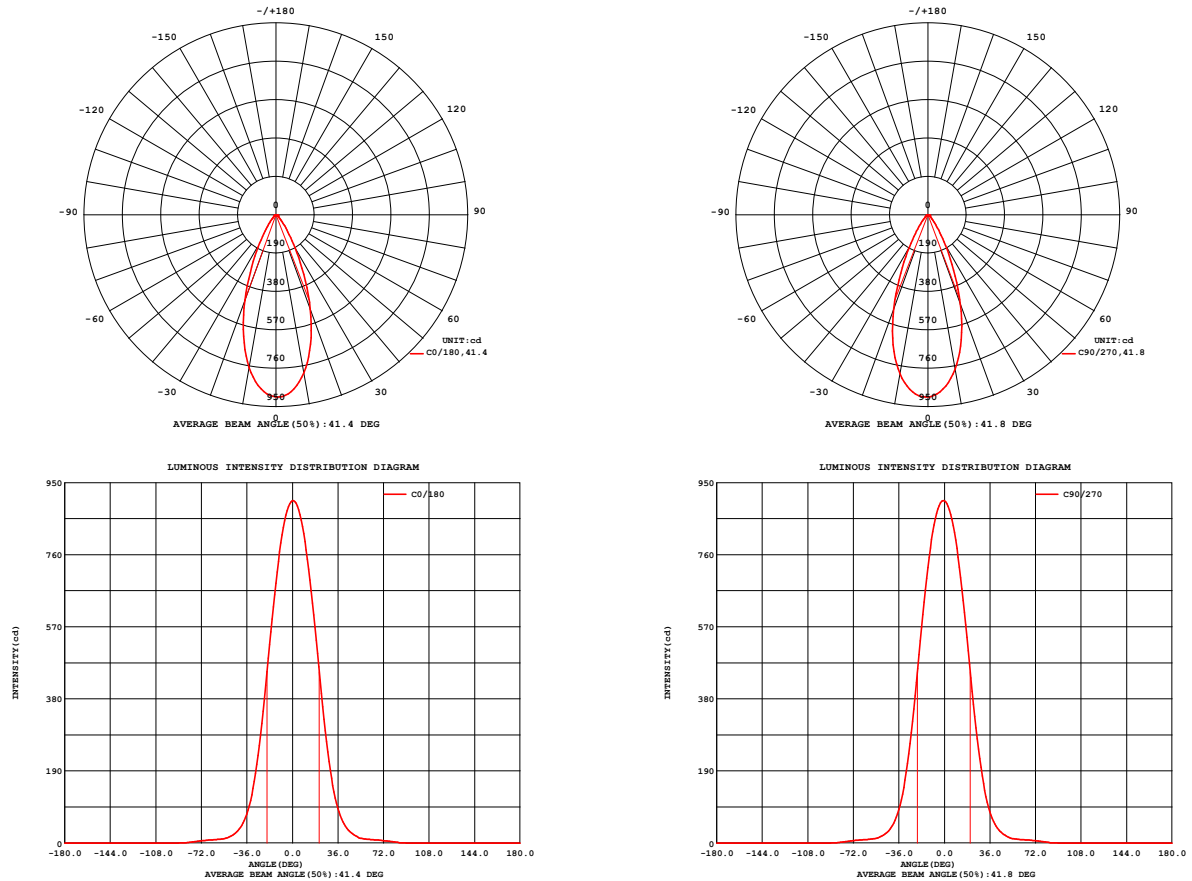


Fig. C0/C180

Fig. C90/C270

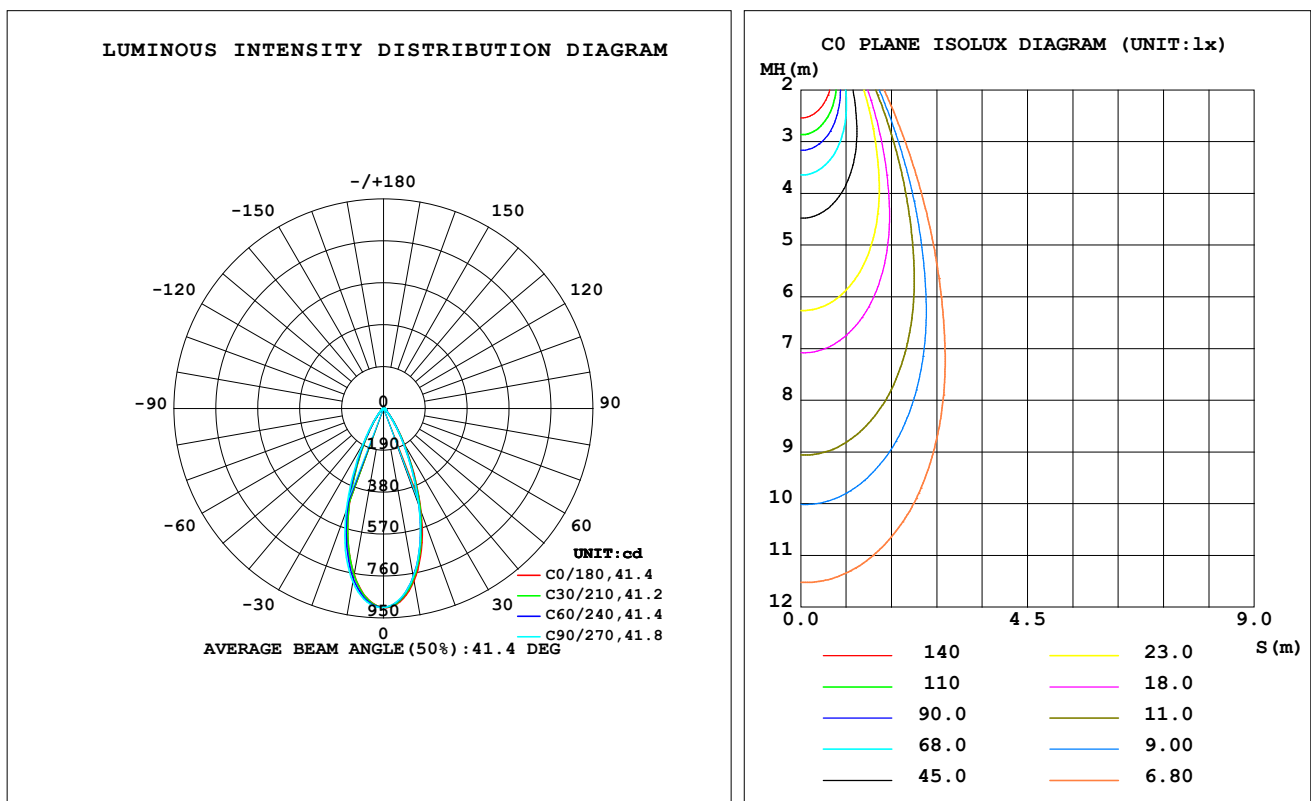
C Range: 0 - 360DEG  
C Interval: For a lens beam angle of 36°  
Test Speed: HIGH  
Temperature: 77.54 °F  
Operators: zoe  
Test Date: 2023-12-29

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461  
Humidity: 65.0%  
Test Distance: 124.409" [K=1.0000]  
Remarks: LAMP: BXR-V-DR-1830G-100Z-A-23 Ra: 90  
LENS: PM-1103B 36R+DIFFUSER  
DRIVER: PUP10A-1WMC-700 500mA  
30minutes warm-up

## LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.19V I:0.0949A P:11.273W PF:0.9868 Freq:59.98Hz Lamp Flux:889.25x1 lm		
NAME: CTL-MM-1.5-DM-36-SQ-AD-OPL	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.: 2312291388
MFR.: MERCURY LIGHTING	SUR.: 0.002601m2	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 45.38 lm/W			
MODEL	Bridgelux	I <sub>max</sub> (cd)	902.8	S/MH (C0/180)	0.65
NOMINAL POWER (W)	11	LOR (%)	57.5	S/MH (C90/270)	0.67
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	511.56	η UP, DN (C0-180)	0.0, 28.6
NOMINAL FLUX (lm)	889.25	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 28.9
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	120	η down (%)	57.5	CIBSE SHR MAX	0.70



C Range: 0 - 360DEG

C Interval: For a lens beam angle of 36°

Test Speed: HIGH

Temperature: 77.54 °F

Operators: zoe

Test Date: 2023-12-29

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461

Humidity: 65.0%

Test Distance: 124.409" [K=1.0000]

Remarks: LAMP: BXRV-DR-1830G-100Z-A-23 Ra: 90

LENS: PM-1103B 36R+DIFFUSER

DRIVER: PUP10A-1WMC-700 500mA

30minutes warm-up

**ZONAL FLUX DIAGRAM**
**ZONAL FLUX DIAGRAM:**

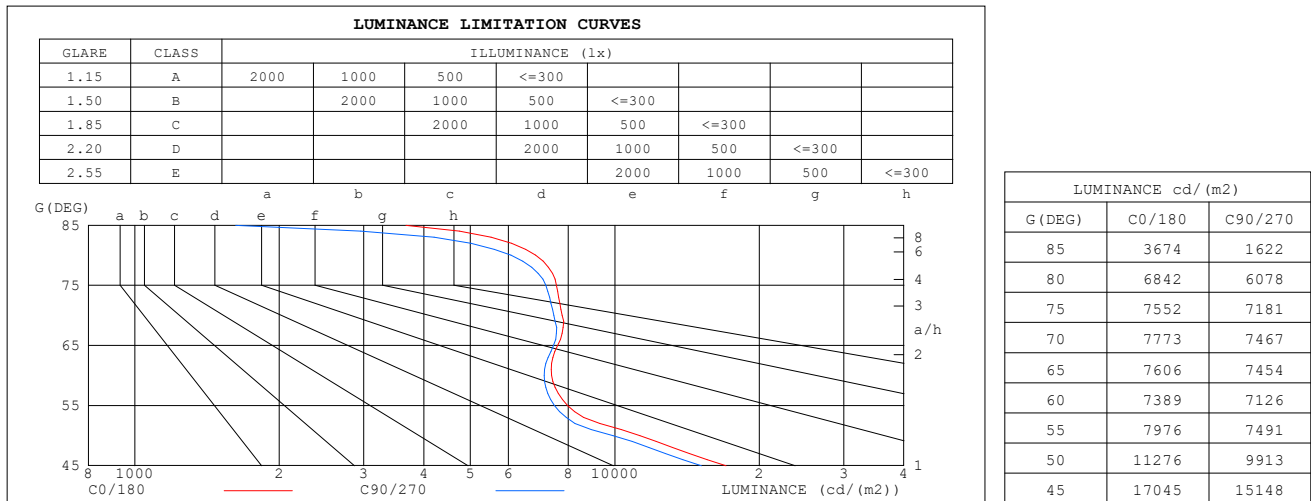
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum,lamp
10	794.5	780.3	776.4	774.0	767.2	777.2	800.1	806.9	0- 10	80.44	80.44	15.7,9.05
20	499.9	481.8	471.1	462.3	451.6	465.3	496.2	511.0	10- 20	177.6	258.0	50.4,29
30	191.9	182.9	176.5	170.7	162.7	168.9	186.7	198.2	20- 30	142.2	400.2	78.2,45
40	56.36	53.92	50.30	47.95	46.37	47.96	52.18	56.72	30- 40	63.30	463.5	90.6,52.1
50	18.85	18.03	16.58	15.65	15.27	15.93	17.32	18.62	40- 50	23.24	486.8	95.2,54.7
60	9.606	9.412	9.270	9.145	9.034	9.182	9.494	9.676	50- 60	10.63	497.4	97.2,55.9
70	6.912	6.801	6.644	6.477	6.353	6.525	6.778	6.898	60- 70	8.048	505.5	98.8,56.8
80	3.089	3.130	2.745	2.522	2.388	2.728	2.822	3.174	70- 80	5.092	510.6	99.8,57.4
90	0	0	0	0	0	0	0	0	80- 90	1.008	511.6	100,57.5
100	0	0	0	0	0	0	0	0	90-100	0	511.6	100,57.5
110	0	0	0	0	0	0	0	0	100-110	0	511.6	100,57.5
120	0	0	0	0	0	0	0	0	110-120	0	511.6	100,57.5
130	0	0	0	0	0	0	0	0	120-130	0	511.6	100,57.5
140	0	0	0	0	0	0	0	0	130-140	0	511.6	100,57.5
150	0	0	0	0	0	0	0	0	140-150	0	511.6	100,57.5
160	0	0	0	0	0	0	0	0	150-160	0	511.6	100,57.5
170	0	0	0	0	0	0	0	0	160-170	0	511.6	100,57.5
180	0	0	0	0	0	0	0	0	170-180	0	511.6	100,57.5
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG  
 C Interval:For a lens beam angle of 36°  
 Test Speed: HIGH  
 Temperature:77.54 °F  
 Operators:zoe  
 Test Date:2023-12-29

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461  
 Humidity:65.0%  
 Test Distance:124.409" [K=1.0000]  
 Remarks: LAMP:BXRV-DR-1830G-100Z-A-23 Ra:90  
 LENS:PM-1103B 36R+DIFFUSER  
 DRIVER:PUP10A-1WMC-700 500mA  
 30minutes warm-up

**LUMINANCE LIMITATION CURVES**

<b>Test:</b> U:120.19V I:0.0949A P:11.273W PF:0.9868 Freq:59.98Hz <b>Lamp Flux:</b> 889.25x1 lm		
<b>NAME:</b> CTL-MM-1.5-DM-36-SQ-AD-OPL	<b>TYPE:</b>	<b>WEIGHT:</b>
<b>SPEC.:</b> 3000K	<b>DIM.:</b>	<b>SERIAL No.:</b> 2312291388
<b>MFR.:</b> MERCURY LIGHTING	<b>SUR.:</b> 0.002601m2	<b>Shielding Angle:</b>


**C Range:** 0 - 360DEG

**C Interval:**For a lens beam angle of 36°

**Test Speed:** HIGH

**Temperature:**77.54 °F

**Operators:**zoe

**Test Date:**2023-12-29

**γ Range:** 0 - 180DEG

**γ Interval:** 1.0DEG

**Test System:**EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461

**Humidity:**65.0%

**Test Distance:**124.409" [K=1.0000]

**Remarks:** LAMP:BXRV-DR-1830G-100Z-A-23 Ra:90

**LENS:**PM-1103B 36R+DIFFUSER

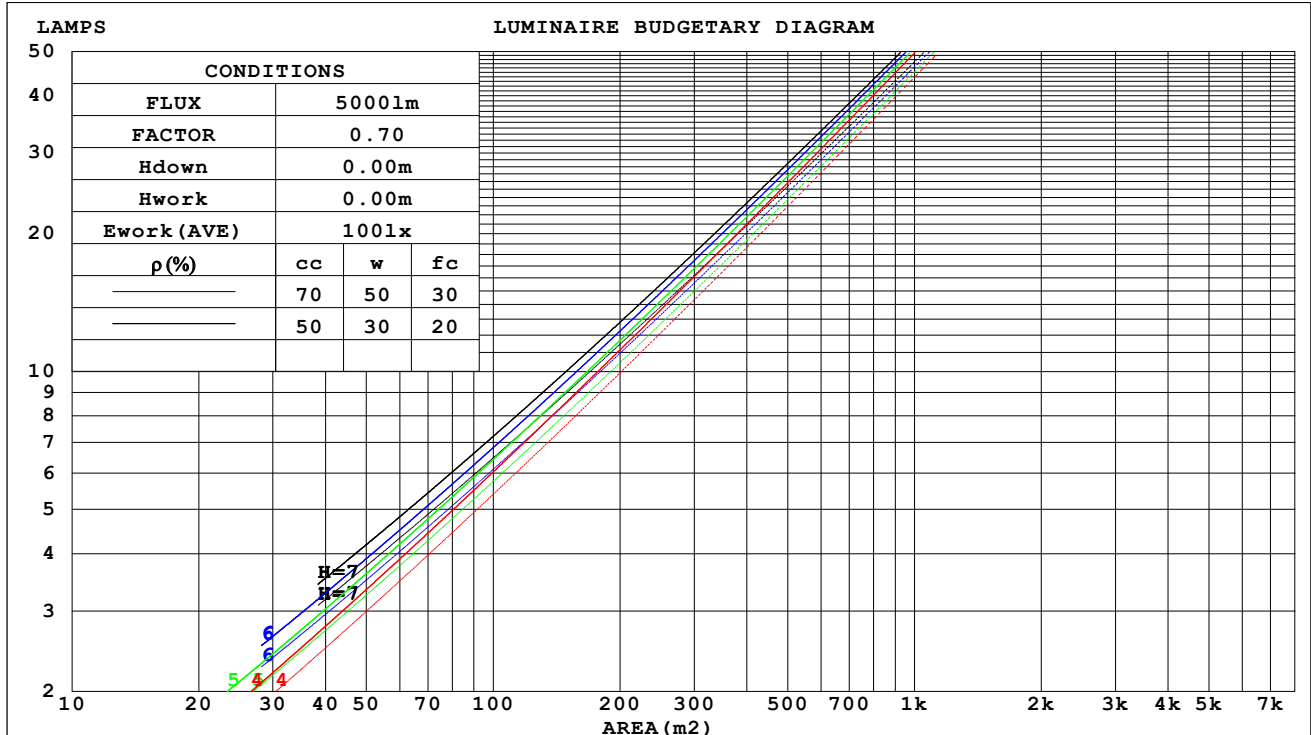
**DRIVER:**PUP10A-1WMC-700 500mA

**30minutes warm-up**

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.19V I:0.0949A P:11.273W PF:0.9868 Freq:59.98Hz Lamp Flux:889.25x1 lm		
NAME: CTL-MM-1.5-DM-36-SQ-AD-OPL	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.: 2312291388
MFR.: MERCURY LIGHTING	SUR.: 0.002601m2	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio                      Coefficients of Utilization(CU)															
0.0	.68	.68	.68	.67	.67	.67	.64	.64	.64	.61	.61	.61	.59	.59	.59	.58
1.0	.64	.62	.61	.62	.61	.60	.60	.59	.58	.58	.57	.56	.56	.55	.55	.54
2.0	.59	.57	.55	.58	.56	.55	.57	.55	.53	.55	.54	.52	.53	.52	.51	.50
3.0	.56	.53	.51	.55	.52	.50	.53	.51	.49	.52	.50	.49	.51	.49	.48	.47
4.0	.52	.49	.47	.52	.49	.47	.50	.48	.46	.49	.47	.46	.48	.47	.45	.44
5.0	.49	.46	.44	.49	.46	.44	.48	.45	.43	.47	.45	.43	.46	.44	.43	.42
6.0	.47	.43	.41	.46	.43	.41	.45	.43	.41	.45	.42	.40	.44	.42	.40	.39
7.0	.44	.41	.39	.44	.41	.39	.43	.40	.38	.43	.40	.38	.42	.40	.38	.37
8.0	.42	.39	.37	.42	.39	.37	.41	.38	.36	.41	.38	.36	.40	.38	.36	.35
9.0	.40	.37	.35	.40	.37	.35	.39	.37	.35	.39	.36	.35	.38	.36	.34	.34
10.0	.38	.35	.33	.38	.35	.33	.38	.35	.33	.37	.35	.33	.37	.35	.33	.32



C Range: 0 - 360DEG

C Interval: For a lens beam angle of 36°

Test Speed: HIGH

Temperature: 77.54 °F

Operators: zoe

Test Date: 2023-12-29

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461

Humidity: 65.0%

Test Distance: 124.409" [K=1.0000]

Remarks: LAMP: BXR-V-DR-1830G-100Z-A-23 Ra: 90

LENS: PM-1103B 36R+DIFFUSER

DRIVER: PUP10A-1WMC-700 500mA

30minutes warm-up

**WEC AND CCEC**

Test:U:120.19V I:0.0949A P:11.273W PF:0.9868 Freq:59.98Hz Lamp Flux:889.25x1 lm		
NAME: CTL-MM-1.5-DM-36-SQ-AD-OPL	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.: 2312291388
MFR.: MERCURY LIGHTING	SUR.: 0.002601m2	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.102	.058	.018	.098	.056	.018	.091	.052	.017	.084	.049	.016	.078	.045	.015	
2.0	.097	.053	.016	.093	.051	.016	.087	.049	.015	.082	.046	.014	.076	.043	.014	
3.0	.091	.048	.015	.088	.047	.014	.083	.045	.014	.078	.043	.013	.074	.041	.013	
4.0	.086	.045	.013	.083	.044	.013	.079	.042	.013	.075	.040	.012	.071	.039	.012	
5.0	.081	.041	.012	.079	.041	.012	.075	.039	.012	.072	.038	.011	.068	.037	.011	
6.0	.077	.039	.011	.075	.038	.011	.072	.037	.011	.069	.036	.010	.066	.035	.010	
7.0	.073	.036	.010	.072	.036	.010	.069	.035	.010	.066	.034	.010	.063	.033	.010	
8.0	.070	.034	.010	.068	.034	.010	.066	.033	.009	.063	.032	.009	.061	.031	.009	
9.0	.067	.032	.009	.065	.032	.009	.063	.031	.009	.061	.031	.009	.059	.030	.009	
10.0	.064	.031	.008	.063	.030	.008	.061	.030	.008	.059	.029	.008	.057	.029	.008	

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.110	.110	.110	.094	.094	.094	.064	.064	.064	.037	.037	.037	.012	.012	.012	
1.0	.098	.090	.083	.084	.078	.072	.058	.053	.050	.033	.031	.029	.011	.010	.009	
2.0	.090	.076	.065	.077	.066	.056	.053	.045	.039	.030	.026	.023	.010	.009	.007	
3.0	.082	.065	.052	.071	.056	.045	.048	.039	.032	.028	.023	.019	.009	.007	.006	
4.0	.076	.057	.042	.065	.049	.037	.045	.034	.026	.026	.020	.015	.008	.007	.005	
5.0	.071	.050	.035	.061	.043	.030	.042	.030	.021	.024	.018	.013	.008	.006	.004	
6.0	.066	.045	.029	.057	.039	.025	.039	.027	.018	.023	.016	.011	.007	.005	.004	
7.0	.062	.040	.025	.054	.035	.022	.037	.024	.015	.022	.014	.009	.007	.005	.003	
8.0	.059	.037	.021	.051	.032	.019	.035	.022	.013	.020	.013	.008	.007	.004	.003	
9.0	.056	.034	.018	.048	.029	.016	.033	.020	.011	.019	.012	.007	.006	.004	.002	
10.0	.053	.031	.016	.046	.027	.014	.032	.019	.010	.019	.011	.006	.006	.004	.002	

C Range: 0 - 360DEG

C Interval:For a lens beam angle of 36°

Test Speed: HIGH

Temperature:77.54 °F

Operators:zoe

Test Date:2023-12-29

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461

Humidity:65.0%

Test Distance:124.409" [K=1.0000]

Remarks: LAMP:BXRV-DR-1830G-100Z-A-23 Ra:90

LENS:PM-1103B 36R+DIFFUSER

DRIVER:PUP10A-1WMC-700 500mA

30minutes warm-up

UGR(Unified Glare Rating) Table

Test:U:120.19V I:0.0949A P:11.273W PF:0.9868 Freq:59.98Hz Lamp Flux:889.25x1 lm											
NAME: CTL-MM-1.5-DM-36-SQ-AD-OPL					TYPE:			WEIGHT:			
SPEC.: 3000K					DIM.:			SERIAL No.: 2312291388			
MFR.: MERCURY LIGHTING					SUR.: 0.002601m2			Shielding Angle:			
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3	
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3	
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Room dimensions		Viewed crosswise					Viewed endwise				
x = 2H y = 2H	2H	17.5	18.4	17.7	18.5	18.7	17.0	17.9	17.3	18.1	18.3
	3H	18.0	18.9	18.3	19.1	19.3	17.7	18.5	17.9	18.7	18.9
	4H	18.4	19.1	18.6	19.4	19.6	18.0	18.8	18.3	19.0	19.2
	6H	18.6	19.4	18.9	19.6	19.9	18.2	19.0	18.5	19.2	19.5
	8H	18.7	19.4	19.0	19.7	19.9	18.3	19.0	18.6	19.3	19.5
	12H	18.7	19.4	19.0	19.7	19.9	18.3	19.0	18.6	19.2	19.5
4H	2H	17.5	18.3	17.8	18.5	18.8	17.1	17.9	17.4	18.1	18.4
	3H	18.3	19.0	18.7	19.3	19.6	18.0	18.7	18.3	19.0	19.2
	4H	18.8	19.4	19.1	19.7	20.0	18.5	19.1	18.8	19.4	19.7
	6H	19.2	19.8	19.6	20.1	20.4	18.9	19.4	19.2	19.7	20.1
	8H	19.3	19.8	19.7	20.2	20.6	18.9	19.5	19.3	19.8	20.2
	12H	19.4	19.8	19.8	20.2	20.6	18.9	19.4	19.3	19.8	20.2
8H	4H	18.9	19.5	19.3	19.8	20.2	18.6	19.2	19.0	19.5	19.9
	6H	19.5	19.9	19.9	20.3	20.7	19.1	19.6	19.6	20.0	20.4
	8H	19.7	20.0	20.1	20.5	20.9	19.3	19.7	19.7	20.1	20.5
	12H	19.7	20.0	20.2	20.5	21.0	19.3	19.6	19.8	20.1	20.5
12H	4H	18.9	19.4	19.3	19.8	20.2	18.6	19.1	19.1	19.5	19.9
	6H	19.5	19.9	19.9	20.3	20.7	19.2	19.6	19.6	20.0	20.4
	8H	19.7	20.0	20.2	20.5	20.9	19.3	19.7	19.8	20.1	20.6
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H	+ 1.1 / - 1.1					+ 1.0 / - 1.1					
1.5H	+ 2.3 / - 1.1					+ 2.0 / - 1.1					
2.0H	+ 1.5 / - 0.6					+ 1.3 / - 0.6					

CIE Pub.117, 889.3 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.4)  
 Area: 0.002601 m2

C Range: 0 - 360DEG

C Interval:For a lens beam angle of 36°

Test Speed: HIGH

Temperature:77.54 °F

Operators:zoe

Test Date:2023-12-29

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461

Humidity:65.0%

Test Distance:124.409" [K=1.0000]

Remarks: LAMP:BXRV-DR-1830G-100Z-A-23 Ra:90

LENS:PM-1103B 36R+DIFFUSER

DRIVER:PUP10A-1WMC-700 500mA

30minutes warm-up



**UTILIZATION FACTORS TABLE**

Test:U:120.19V I:0.0949A P:11.273W PF:0.9868 Freq:59.98Hz Lamp Flux:889.25x1 lm		
NAME: CTL-MM-1.5-DM-36-SQ-AD-OPL	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.: 2312291388
MFR.: MERCURY LIGHTING	SUR.: 0.002601m2	Shielding Angle:

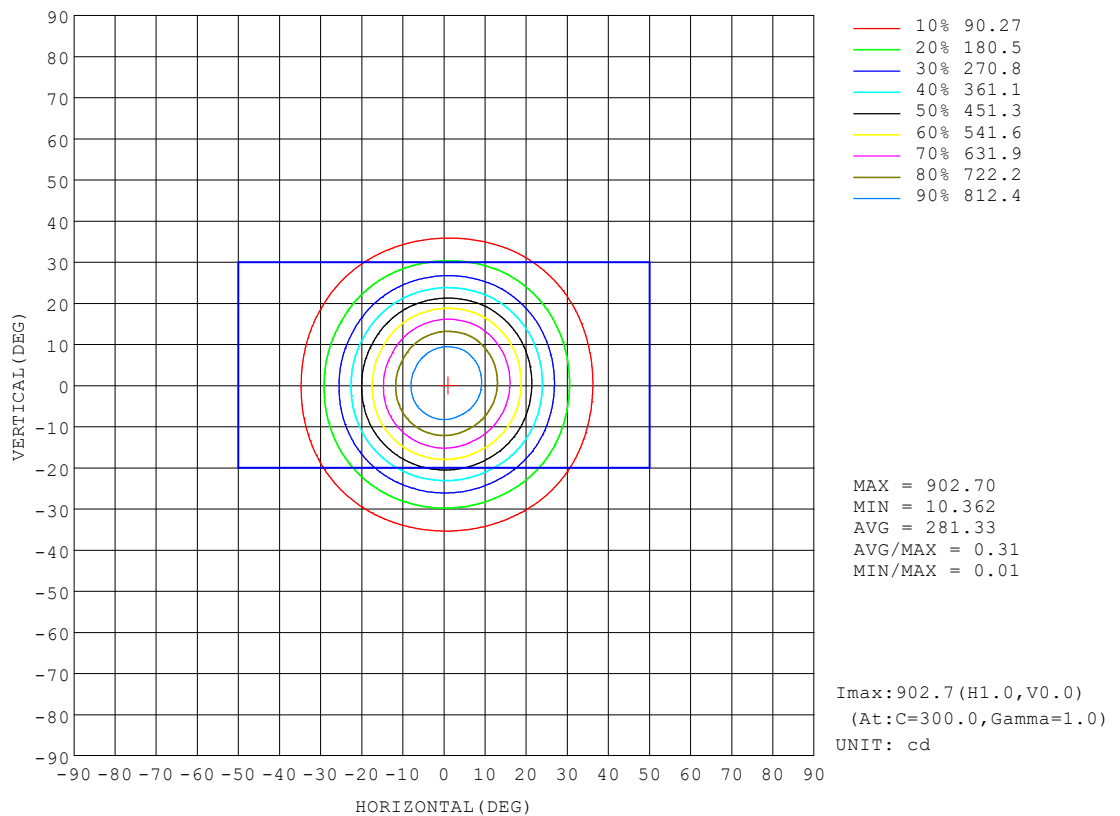
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	49	46	43	49	45	43	49	45	43	41
0.80	54	50	48	53	50	48	53	50	48	45
1.00	56	53	51	56	53	51	55	53	50	48
1.25	59	55	53	58	55	53	57	54	53	50
1.50	60	57	55	60	57	55	58	56	54	52
2.00	62	59	57	61	59	57	60	58	56	53
2.50	63	61	59	62	60	58	60	59	57	54
3.00	64	62	60	63	61	60	61	59	58	55
4.00	65	63	62	64	63	61	62	61	60	56
5.00	66	65	63	65	64	63	62	62	61	56
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG  
 C Interval: For a lens beam angle of 36°  
 Test Speed: HIGH  
 Temperature: 77.54 °F  
 Operators: zoe  
 Test Date: 2023-12-29

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461  
 Humidity: 65.0%  
 Test Distance: 124.409" [K=1.0000]  
 Remarks: LAMP: BXRV-DR-1830G-100Z-A-23 Ra: 90  
 LENS: PM-1103B 36R+DIFFUSER  
 DRIVER: PUP10A-1WMC-700 500mA  
 30minutes warm-up

## ISOCANDELA DIAGRAM

Test:U:120.19V I:0.0949A P:11.273W PF:0.9868 Freq:59.98Hz Lamp Flux:889.25x1 lm		
NAME: CTL-MM-1.5-DM-36-SQ-AD-OPL	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.: 2312291388
MFR.: MERCURY LIGHTING	SUR.: 0.002601m2	Shielding Angle:

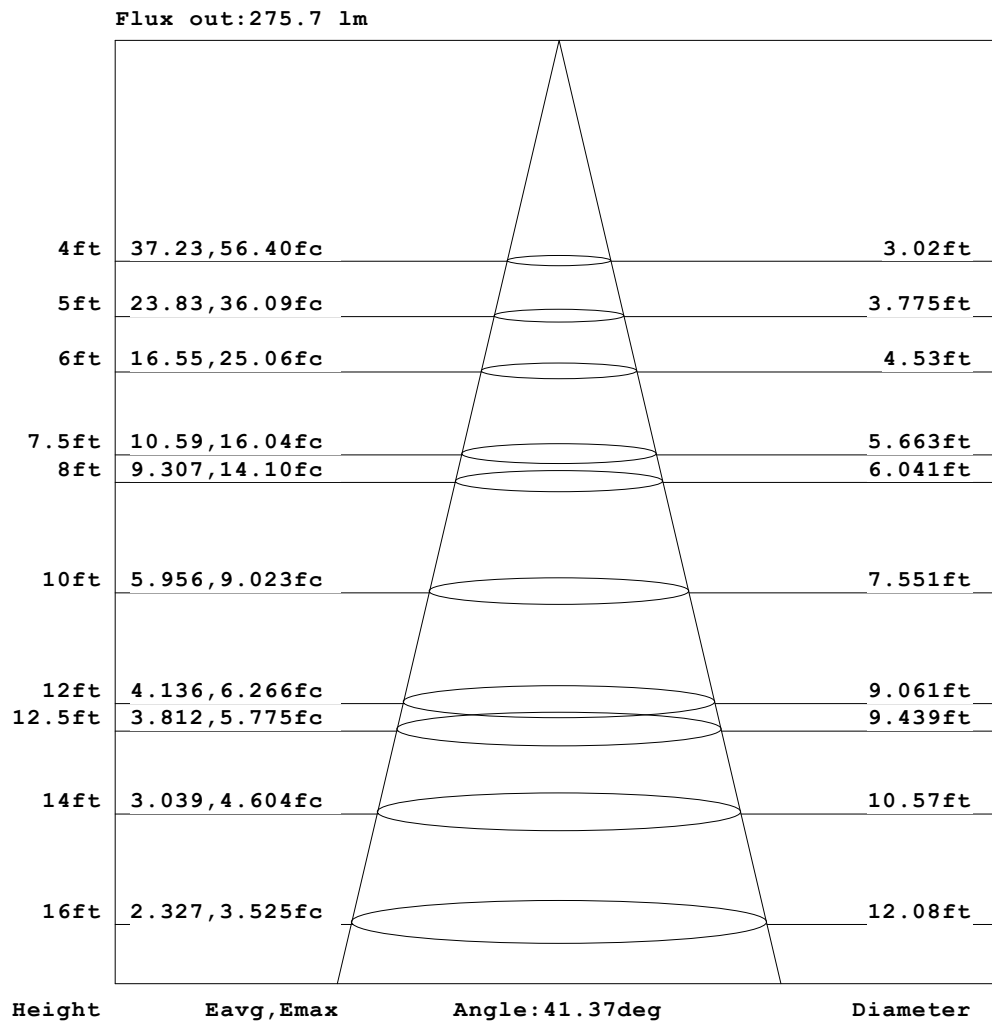


C Range: 0 - 360DEG  
 C Interval: For a lens beam angle of 36°  
 Test Speed: HIGH  
 Temperature: 77.54 °F  
 Operators: zoe  
 Test Date: 2023-12-29

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461  
 Humidity: 65.0%  
 Test Distance: 124.409" [K=1.0000]  
 Remarks: LAMP: BXR-V-DR-1830G-100Z-A-23 Ra: 90  
 LENS: PM-1103B 36R+DIFFUSER  
 DRIVER: PUP10A-1WMC-700 500mA  
 30minutes warm-up

**AAI Figure**

Test:U:120.19V I:0.0949A P:11.273W PF:0.9868 Freq:59.98Hz Lamp Flux:889.25x1 lm		
NAME: CTL-MM-1.5-DM-36-SQ-AD-OPL	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.: 2312291388
MFR.: MERCURY LIGHTING	SUR.: 0.002601m2	Shielding Angle:



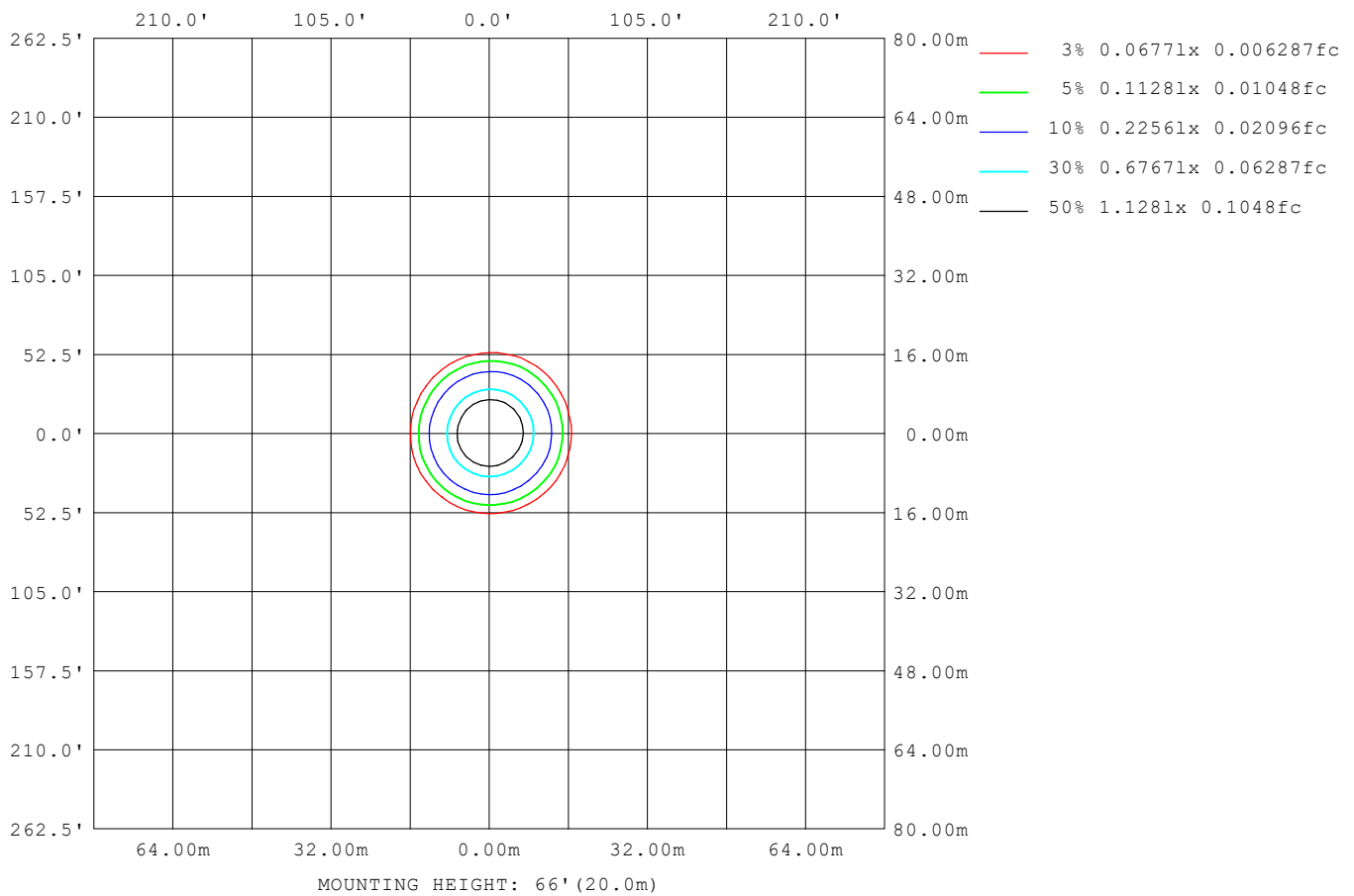
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: For a lens beam angle of 36°  
 Test Speed: HIGH  
 Temperature: 77.54 °F  
 Operators: zoe  
 Test Date: 2023-12-29

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461  
 Humidity: 65.0%  
 Test Distance: 124.409" [K=1.0000]  
 Remarks: LAMP: BXR-V-DR-1830G-100Z-A-23 Ra: 90  
 LENS: PM-1103B 36R+DIFFUSER  
 DRIVER: PUP10A-1WMC-700 500mA  
 30minutes warm-up

**ISOLUX DIAGRAM**

<b>Test:</b> U:120.19V I:0.0949A P:11.273W PF:0.9868 Freq:59.98Hz <b>Lamp Flux:</b> 889.25x1 lm		
<b>NAME:</b> CTL-MM-1.5-DM-36-SQ-AD-OPL	<b>TYPE:</b>	<b>WEIGHT:</b>
<b>SPEC.:</b> 3000K	<b>DIM.:</b>	<b>SERIAL No.:</b> 2312291388
<b>MFR.:</b> MERCURY LIGHTING	<b>SUR.:</b> 0.002601m2	<b>Shielding Angle:</b>



**C Range:** 0 - 360DEG  
**C Interval:** For a lens beam angle of 36°  
**Test Speed:** HIGH  
**Temperature:** 77.54 °F  
**Operators:** zoe  
**Test Date:** 2023-12-29

**γ Range:** 0 - 180DEG  
**γ Interval:** 1.0DEG  
**Test System:** EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461  
**Humidity:** 65.0%  
**Test Distance:** 124.409" [K=1.0000]  
**Remarks:** LAMP: BXRV-DR-1830G-100Z-A-23 Ra:90  
 LENS: PM-1103B 36R+DIFFUSER  
 DRIVER: PUP10A-1WMC-700 500mA  
 30minutes warm-up

**LED Avg.L Report**

Test:U:120.19V I:0.0949A P:11.273W PF:0.9868 Freq:59.98Hz Lamp Flux:889.25x1 lm		
NAME: CTL-MM-1.5-DM-36-SQ-AD-OPL	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.: 2312291388
MFR.: MERCURY LIGHTING	SUR.: 0.002601m2	Shielding Angle:

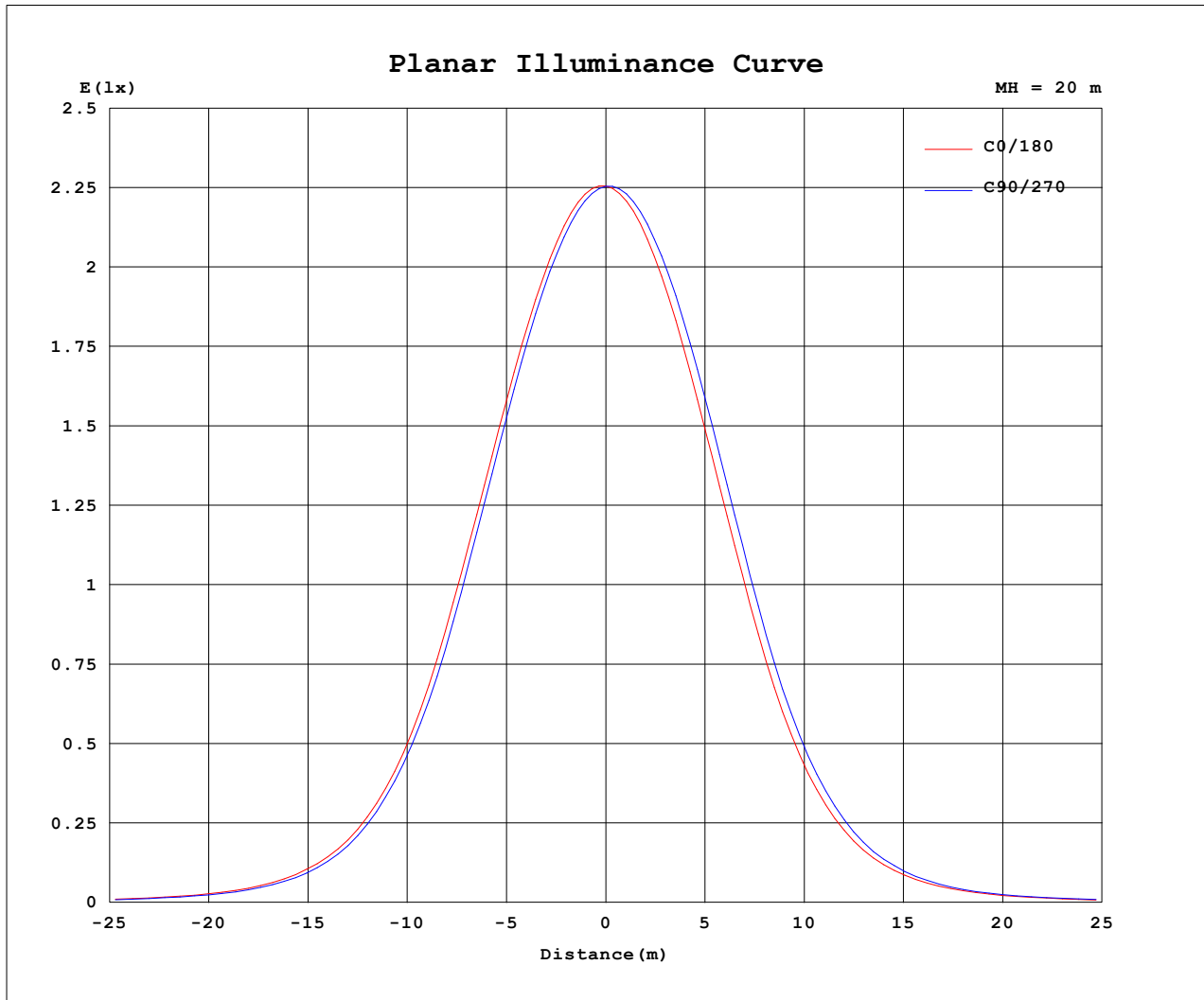
AvgL	cd/m2
L_0~180 (65) av	7440
L_0~180 (75) av	7142
L_0~180 (85) av	2180
L_90~270 (65) av	7495
L_90~270 (75) av	7259
L_90~270 (85) av	1954
L_45 (65) av	7473
L_45 (75) av	7229
L_45 (85) av	2848

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: For a lens beam angle of 36°  
 Test Speed: HIGH  
 Temperature: 77.54 °F  
 Operators: zoe  
 Test Date: 2023-12-29

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461  
 Humidity: 65.0%  
 Test Distance: 124.409" [K=1.0000]  
 Remarks: LAMP: BXRV-DR-1830G-100Z-A-23 Ra: 90  
 LENS: PM-1103B 36R+DIFFUSER  
 DRIVER: PUP10A-1WMC-700 500mA  
 30minutes warm-up

### Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: For a lens beam angle of 36°  
Test Speed: HIGH  
Temperature: 77.54 °F  
Operators: zoe  
Test Date: 2023-12-29

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461  
Humidity: 65.0%  
Test Distance: 124.409" [K=1.0000]  
Remarks: LAMP: BXRV-DR-1830G-100Z-A-23 Ra: 90  
LENS: PM-1103B 36R+DIFFUSER  
DRIVER: PUP10A-1WMC-700 500mA  
30minutes warm-up

**LUMINOUS DISTRIBUTION INTENSITY DATA**

Test:U:120.19V I:0.0949A P:11.273W PF:0.9868 Freq:59.98Hz Lamp Flux:889.25x1 lm		
NAME: CTL-MM-1.5-DM-36-SQ-AD-OPL	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.: 2312291388
MFR.: MERCURY LIGHTING	SUR.: 0.002601m2	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	30	60	90	120	150	180	210	240	270	300	330						
0	902	902	902	902	902	902	902	902	902	902	902	902						
5	878	873	868	866	865	865	864	866	874	880	884	882						
10	795	785	776	776	775	773	767	769	786	800	809	804						
15	664	651	639	639	636	631	623	624	646	667	681	676						
20	500	489	475	471	465	459	452	454	477	496	513	509						
25	326	319	306	303	299	293	285	286	305	321	335	333						
30	192	187	178	177	173	169	163	163	175	187	199	197						
35	105	103	96.8	94.6	92.0	89.9	87.1	88.0	93.2	99.4	107	107						
40	56.4	55.6	52.3	50.3	48.4	47.5	46.4	46.6	49.3	52.2	56.3	57.1						
45	31.3	31.0	29.3	27.9	26.7	26.2	25.9	26.0	27.3	28.5	30.6	31.3						
50	18.8	18.6	17.5	16.6	15.8	15.5	15.3	15.5	16.4	17.3	18.4	18.8						
55	11.9	11.7	11.4	11.2	11.0	10.9	10.8	10.9	11.2	11.6	12.0	12.0						
60	9.61	9.48	9.34	9.27	9.18	9.11	9.03	9.08	9.29	9.49	9.66	9.69						
65	8.36	8.30	8.23	8.20	8.13	8.07	8.00	8.03	8.19	8.28	8.38	8.39						
70	6.91	6.87	6.73	6.64	6.53	6.43	6.35	6.43	6.63	6.78	6.88	6.91						
75	5.08	5.06	4.94	4.84	4.73	4.63	4.53	4.62	4.80	4.94	5.06	5.08						
80	3.09	3.24	3.02	2.75	2.45	2.60	2.39	2.67	2.79	2.82	3.17	3.17						
85	0.83	0.97	0.74	0.37	0.36	0.31	0.16	0.33	0.48	0.52	0.88	0.93						
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
105	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
115	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
125	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
135	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
145	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
155	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
160	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
165	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
175	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						

C Range: 0 - 360DEG

C Interval: For a lens beam angle of 36°

Test Speed: HIGH

Temperature: 77.54 °F

Operators: zoe

Test Date: 2023-12-29

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.00.461

Humidity: 65.0%

Test Distance: 124.409" [K=1.0000]

Remarks: LAMP: BXR-DR-1830G-100Z-A-23 Ra: 90

LENS: PM-1103B 36R+DIFFUSER

DRIVER: PUP10A-1WMC-700 500mA

30minutes warm-up