

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: METALUX

Report Number: P294035

Luminaire Tested: **24GR-LD5-85-A19/156-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294035
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33308)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-85-A19/156-UNV-L82765-W2A1-U-3000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7616.0 lumens
Efficiency: N/A
Efficacy: 123.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.25
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

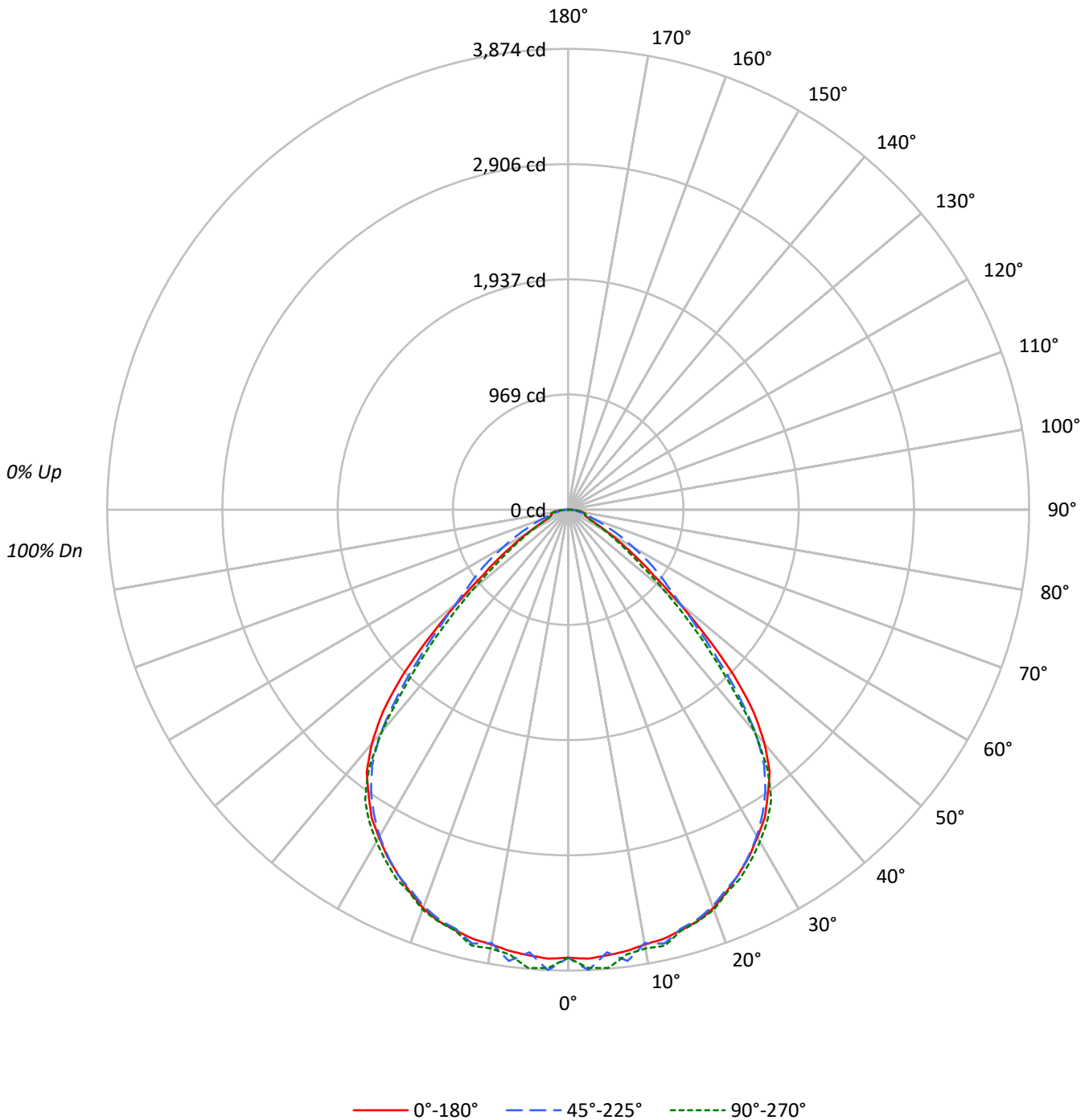
Input Watts (W): 61.938
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88					88			
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77					77			
3	95	86	79	74	93	85	78	73	82	77	72	79	75	71	77	73	70	68					68			
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	60					60			
5	82	71	63	57	80	70	62	57	68	61	56	66	60	56	64	59	55	53					53			
6	76	65	57	51	75	64	56	51	62	55	50	60	55	50	59	54	50	48					48			
7	71	59	51	46	70	58	51	46	57	50	45	56	50	45	54	49	45	43					43			
8	67	55	47	42	65	54	47	41	53	46	41	51	45	41	50	45	41	39					39			
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36					36			
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33					33			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5067	5067	5067
5°	5078	5045	5223
10°	5070	5055	5117
15°	5099	5082	5103
20°	5103	5082	5124
25°	5024	5028	5077
30°	4941	4925	5005
35°	4801	4743	4886
40°	4509	4307	4284
45°	3738	3381	3207
50°	2514	2565	2192
55°	1658	2152	1437
60°	1063	1698	984
65°	685	1297	666
70°	606	929	606
75°	782	738	789
80°	957	635	1004
85°	1115	945	1170



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	360.6	4.7
10°-20°	1035.3	13.6
20°-30°	1558.7	20.5
30°-40°	1806.6	23.7
40°-50°	1411.3	18.5
50°-60°	753.6	9.9
60°-70°	387.5	5.1
70°-80°	219.2	2.9
80°-90°	83.3	1.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2954.6	38.8
0°-40°	4761.2	62.5
0°-60°	6926.0	90.9
0°-90°	7616.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7616.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3766	3766	3766	3766	3766	
5°	3760	3865	3735	3838	3867	358
15°	3661	3684	3648	3672	3663	1034
25°	3384	3373	3387	3382	3420	1559
35°	2923	2910	2888	2945	2975	1822
45°	1964	1966	1777	1761	1685	1480
55°	707	894	917	827	613	652
65°	215	449	407	448	209	237
75°	150	282	142	264	152	152
85°	72	94	61	94	76	74
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3765.9	3765.9	3765.9	3765.9	3765.9
2.5°	3778.1	3846.6	3873.5	3840.5	3855.2
5°	3759.8	3865.0	3735.3	3838.1	3867.4
7.5°	3742.7	3731.6	3825.8	3728.0	3769.6
10°	3710.9	3718.2	3699.8	3769.6	3745.1
12.5°	3696.2	3739.0	3735.3	3699.8	3753.7
15°	3660.7	3683.9	3648.5	3671.7	3663.2
17.5°	3625.2	3614.2	3610.6	3620.3	3628.9
20°	3564.1	3527.4	3549.4	3551.9	3578.8
22.5°	3476.0	3454.0	3458.9	3480.9	3483.4
25°	3384.3	3373.3	3386.7	3381.8	3419.8
27.5°	3288.9	3274.2	3282.8	3301.1	3324.4
30°	3180.0	3176.4	3170.2	3186.1	3221.6
32.5°	3072.4	3043.0	3038.2	3071.2	3111.5
35°	2923.2	2909.7	2887.7	2945.2	2974.6
37.5°	2781.3	2739.7	2704.3	2738.5	2750.7
40°	2567.3	2535.5	2452.3	2456.0	2438.8
42.5°	2304.3	2281.1	2122.1	2093.9	2046.2
45°	1964.3	1965.5	1777.1	1761.2	1685.4
47.5°	1569.2	1638.9	1475.0	1456.7	1344.2
50°	1201.1	1327.1	1225.5	1196.2	1047.0
52.5°	901.4	1086.1	1054.3	990.7	785.2
55°	706.9	894.1	917.3	826.8	612.8
57.5°	532.0	736.3	774.2	699.6	473.3
60°	395.1	620.1	631.1	601.8	365.7
62.5°	293.5	527.2	512.5	516.1	271.5
65°	215.3	448.9	407.3	447.7	209.1
67.5°	176.1	388.9	316.8	387.7	170.0
70°	154.1	344.9	236.1	341.2	154.1
72.5°	149.2	316.8	187.1	303.3	150.4
75°	150.4	282.5	141.9	264.2	151.7
77.5°	138.2	232.4	107.6	225.0	144.3
80°	123.5	176.1	81.9	178.6	129.6
82.5°	105.2	128.4	66.0	132.1	108.9
85°	72.2	94.2	61.2	94.2	75.8
87.5°	34.2	56.3	37.9	53.8	39.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)