

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: P294083

Luminaire Tested: **24GR-LD5-85-A19/156-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294083
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-L93050-W2A1-U-3000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6277.0 lumens
Efficiency: N/A
Efficacy: 98.3 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

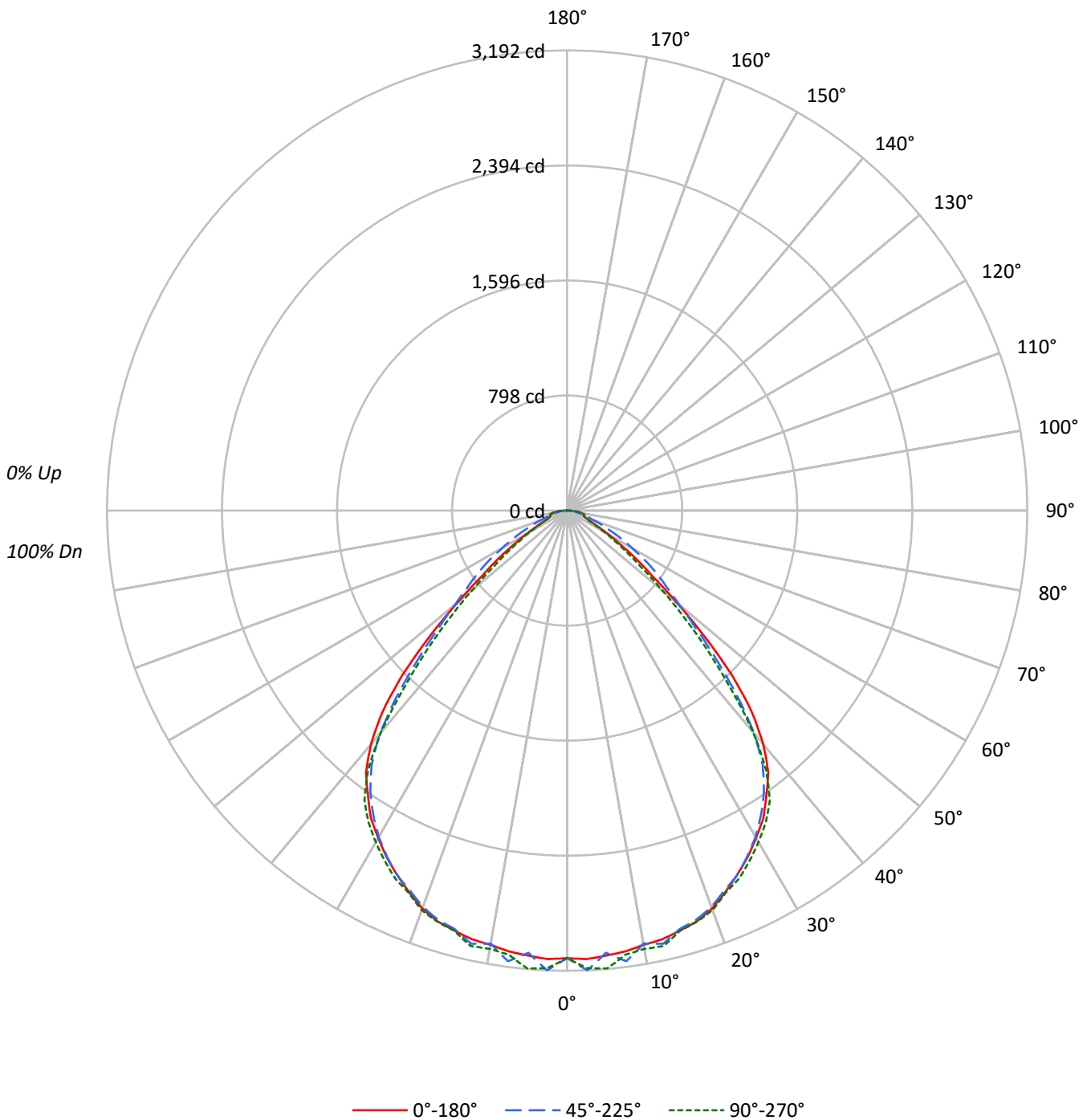
Input Watts (W): 63.838269
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4176	4176	4176
5°	4185	4158	4305
10°	4179	4166	4217
15°	4203	4189	4205
20°	4206	4189	4223
25°	4141	4144	4184
30°	4072	4059	4125
35°	3957	3909	4027
40°	3716	3550	3531
45°	3080	2787	2643
50°	2072	2114	1806
55°	1367	1773	1185
60°	876	1400	811
65°	565	1069	549
70°	500	766	500
75°	645	608	650
80°	789	523	828
85°	919	778	965



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	297.2	4.7
10°-20°	853.3	13.6
20°-30°	1284.6	20.5
30°-40°	1489.0	23.7
40°-50°	1163.1	18.5
50°-60°	621.1	9.9
60°-70°	319.4	5.1
70°-80°	180.7	2.9
80°-90°	68.6	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°	2435.1	38.8
0°-40°	3924.1	62.5
0°-60°	5708.3	90.9
0°-90°	6277.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6277.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3104	3104	3104	3104	3104	
5°	3099	3185	3079	3163	3188	295
15°	3017	3036	3007	3026	3019	852
25°	2789	2780	2791	2787	2818	1285
35°	2409	2398	2380	2427	2452	1502
45°	1619	1620	1465	1452	1389	1220
55°	583	737	756	681	505	538
65°	177	370	336	369	172	195
75°	124	233	117	218	125	126
85°	60	78	50	78	62	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3103.8	3103.8	3103.8	3103.8	3103.8
2.5°	3113.9	3170.3	3192.5	3165.3	3177.4
5°	3098.8	3185.4	3078.6	3163.3	3187.5
7.5°	3084.6	3075.6	3153.2	3072.5	3106.8
10°	3058.4	3064.5	3049.4	3106.8	3086.7
12.5°	3046.3	3081.6	3078.6	3049.4	3093.7
15°	3017.1	3036.3	3007.0	3026.2	3019.1
17.5°	2987.9	2978.8	2975.8	2983.8	2990.9
20°	2937.5	2907.2	2925.4	2927.4	2949.6
22.5°	2864.9	2846.7	2850.8	2868.9	2870.9
25°	2789.3	2780.2	2791.3	2787.3	2818.5
27.5°	2710.7	2698.6	2705.6	2720.7	2739.9
30°	2620.9	2617.9	2612.9	2626.0	2655.2
32.5°	2532.2	2508.0	2504.0	2531.2	2564.5
35°	2409.2	2398.2	2380.0	2427.4	2451.6
37.5°	2292.3	2258.0	2228.8	2257.0	2267.1
40°	2115.9	2089.7	2021.1	2024.2	2010.1
42.5°	1899.2	1880.0	1749.0	1725.8	1686.5
45°	1618.9	1619.9	1464.7	1451.6	1389.1
47.5°	1293.3	1350.8	1215.7	1200.6	1107.9
50°	989.9	1093.7	1010.1	985.9	862.9
52.5°	742.9	895.2	868.9	816.5	647.2
55°	582.7	736.9	756.0	681.4	505.0
57.5°	438.5	606.8	638.1	576.6	390.1
60°	325.6	511.1	520.2	496.0	301.4
62.5°	241.9	434.5	422.4	425.4	223.8
65°	177.4	370.0	335.7	368.9	172.4
67.5°	145.2	320.6	261.1	319.6	140.1
70°	127.0	284.3	194.6	281.2	127.0
72.5°	123.0	261.1	154.2	250.0	124.0
75°	124.0	232.9	116.9	217.7	125.0
77.5°	113.9	191.5	88.7	185.5	119.0
80°	101.8	145.2	67.5	147.2	106.9
82.5°	86.7	105.8	54.4	108.9	89.7
85°	59.5	77.6	50.4	77.6	62.5
87.5°	28.2	46.4	31.2	44.4	32.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)