

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: P293580

Luminaire Tested: **24GR-LD5-85-A-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293580
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33306)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-85-A-UNV-L93050-W2A1-U-3500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7129.0 lumens
Efficiency: N/A
Efficacy: 112.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.26
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

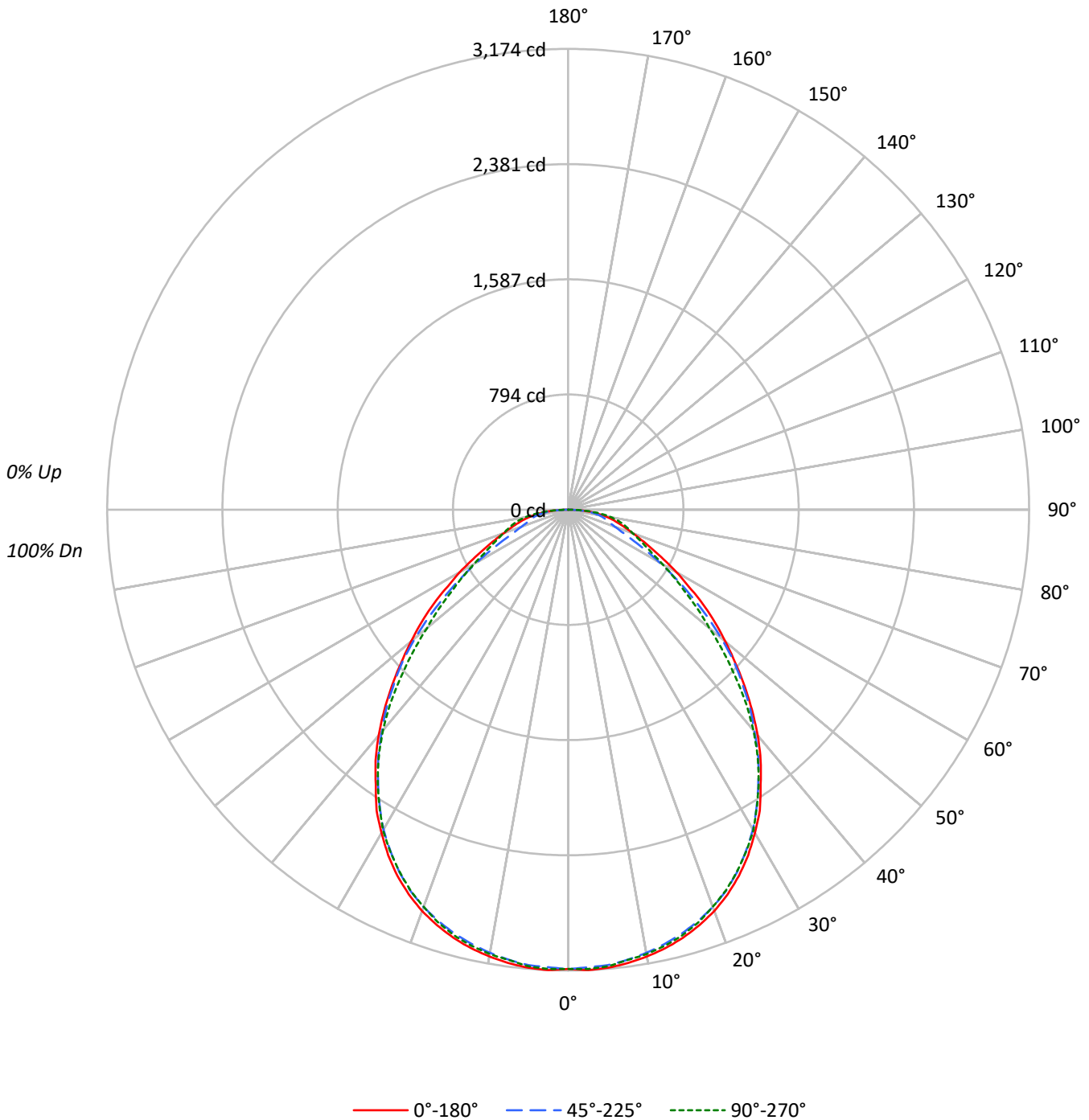
Input Watts (W): 63.588657
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86					86			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73					73			
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63					63			
4	86	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55					55			
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49					49			
6	73	61	53	46	72	60	52	46	58	51	46	57	50	45	55	49	45	43					43			
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39					39			
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35					35			
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	38	33	32					32			
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	30	29					29			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4256	4256	4256
5°	4277	4253	4263
10°	4269	4234	4246
15°	4253	4210	4228
20°	4212	4169	4168
25°	4130	4086	4083
30°	3994	3953	3961
35°	3793	3750	3756
40°	3567	3505	3484
45°	3269	3225	3097
50°	2955	2875	2658
55°	2653	2416	2292
60°	2324	1944	2015
65°	2027	1529	1855
70°	1854	1334	1854
75°	1855	1420	2044
80°	2014	1673	2330
85°	2211	1886	2499



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	299.5	4.2
10°-20°	854.8	12.0
20°-30°	1267.5	17.8
30°-40°	1429.9	20.1
40°-50°	1295.1	18.2
50°-60°	934.3	13.1
60°-70°	557.9	7.8
70°-80°	344.8	4.8
80°-90°	145.3	2.0
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°	2421.8	34.0
0°-40°	3851.7	54.0
0°-60°	6081.1	85.3
0°-90°	7129.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7129.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3163	3163	3163	3163	3163	
5°	3166	3162	3149	3145	3156	301
15°	3053	3034	3022	3023	3035	861
25°	2782	2767	2752	2742	2750	1278
35°	2310	2306	2283	2284	2286	1445
45°	1718	1707	1695	1653	1628	1324
55°	1131	1096	1030	979	977	1010
65°	637	561	480	545	583	640
75°	357	310	273	340	393	381
85°	143	126	122	160	162	150
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3163.1	3163.1	3163.1	3163.1	3163.1
2.5°	3174.1	3165.3	3154.2	3160.9	3166.4
5°	3166.4	3162.0	3148.7	3145.4	3156.4
7.5°	3149.8	3138.8	3126.7	3132.2	3127.8
10°	3124.5	3114.6	3099.2	3100.3	3108.0
12.5°	3093.7	3081.6	3065.0	3069.4	3076.0
15°	3052.9	3034.2	3022.1	3023.2	3035.3
17.5°	3001.2	2986.8	2971.4	2974.7	2980.2
20°	2941.7	2934.0	2911.9	2905.3	2910.8
22.5°	2866.8	2852.5	2840.4	2837.1	2838.2
25°	2782.0	2766.6	2752.3	2742.3	2750.1
27.5°	2682.9	2669.7	2650.9	2647.6	2654.2
30°	2570.5	2560.6	2544.1	2539.7	2549.6
32.5°	2456.0	2439.5	2416.3	2416.3	2418.5
35°	2309.5	2306.2	2283.1	2284.2	2286.4
37.5°	2177.4	2161.9	2148.7	2135.5	2142.1
40°	2030.9	2013.3	1995.6	1986.8	1983.5
42.5°	1873.4	1860.2	1852.5	1820.5	1812.8
45°	1718.1	1707.1	1695.0	1653.1	1627.8
47.5°	1559.5	1557.3	1547.4	1473.6	1448.3
50°	1411.9	1408.6	1373.4	1295.2	1269.8
52.5°	1272.1	1250.0	1203.8	1126.7	1122.3
55°	1131.1	1095.8	1029.8	979.1	976.9
57.5°	982.4	940.5	873.4	845.8	860.1
60°	863.5	799.6	722.5	725.8	748.9
62.5°	740.1	668.5	592.5	625.6	653.1
65°	636.6	560.6	480.2	545.2	582.6
67.5°	546.3	475.8	398.7	485.7	522.0
70°	471.4	414.1	339.2	430.6	471.4
72.5°	411.9	359.0	300.7	386.6	433.9
75°	356.8	309.5	273.1	340.3	393.2
77.5°	309.5	263.2	246.7	300.7	352.4
80°	259.9	218.1	215.9	262.1	300.7
82.5°	202.6	174.0	174.0	219.2	242.3
85°	143.2	125.6	122.2	159.7	161.9
87.5°	73.8	70.5	63.9	83.7	83.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)