

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: P293063

Luminaire Tested: **24GR-LD5-56-F1-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293063
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-12)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-56-F1-UNV-L93050-W2A1-U-4500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5263.0 lumens
Efficiency: N/A
Efficacy: 129.6 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.25
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

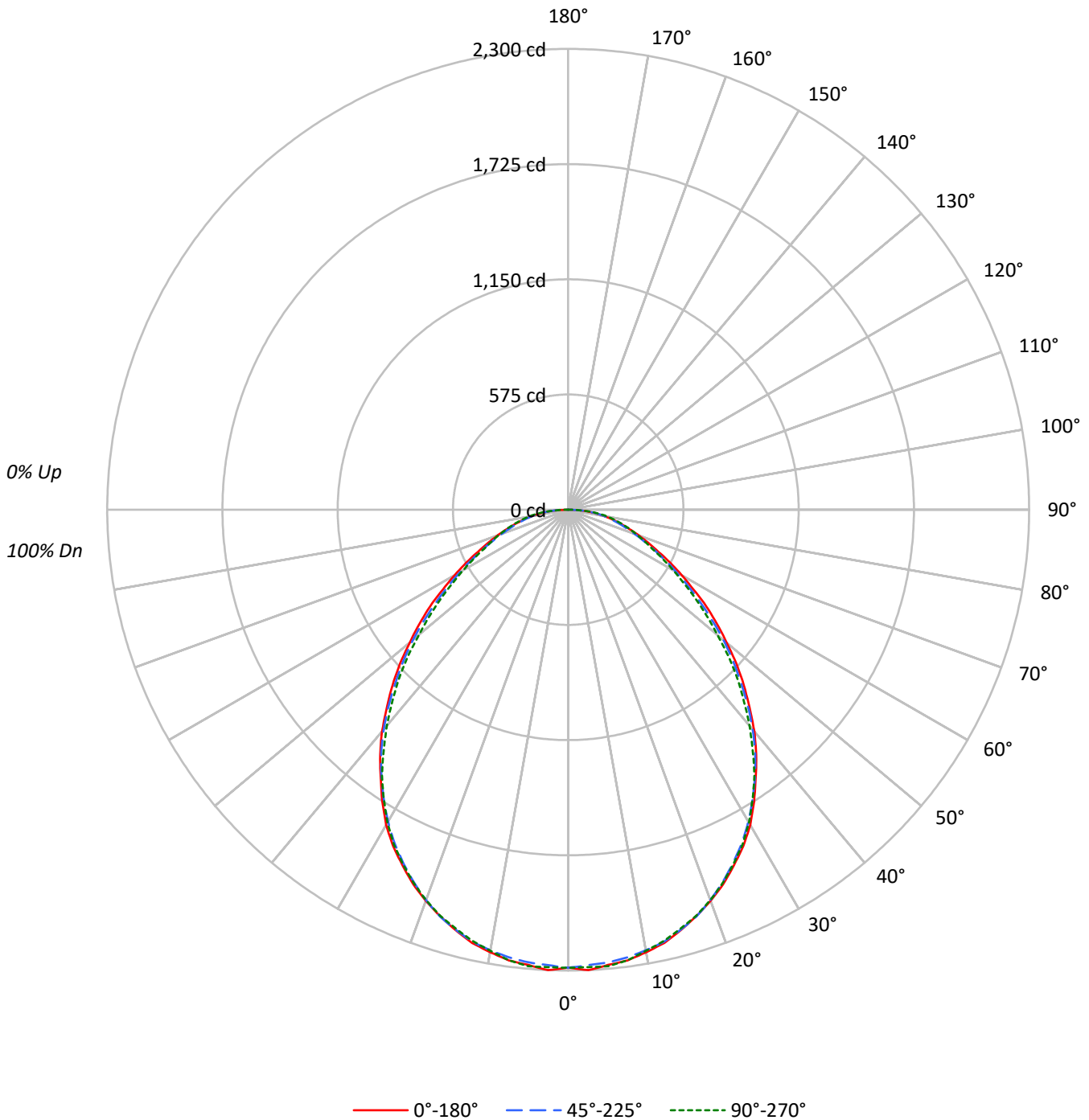
Input Watts (W): 40.603614
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85					85			
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	72					72			
3	92	82	74	68	90	81	73	68	78	72	67	75	70	65	72	68	64	62					62			
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56	54					54			
5	78	66	58	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47					47			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42					42			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37					37			
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34					34			
9	59	46	38	33	58	46	38	33	44	38	33	43	37	32	42	37	32	31					31			
10	56	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3076	3076	3076
5°	3080	3063	3089
10°	3064	3051	3054
15°	3026	3023	3015
20°	2975	2969	2969
25°	2906	2890	2896
30°	2822	2793	2801
35°	2680	2667	2660
40°	2538	2515	2471
45°	2359	2318	2272
50°	2161	2113	2034
55°	1974	1884	1821
60°	1759	1674	1630
65°	1583	1500	1479
70°	1469	1379	1435
75°	1405	1343	1456
80°	1405	1405	1556
85°	1457	1474	1643



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	215.9	4.1
10°-20°	611.0	11.6
20°-30°	896.7	17.0
30°-40°	1013.8	19.3
40°-50°	937.0	17.8
50°-60°	721.9	13.7
60°-70°	478.0	9.1
70°-80°	284.6	5.4
80°-90°	104.2	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°	1723.6	32.7
0°-40°	2737.4	52.0
0°-60°	4396.2	83.5
0°-90°	5263.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5263.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2286	2286	2286	2286	2286	
5°	2281	2281	2268	2269	2287	217
15°	2172	2168	2170	2169	2164	612
25°	1957	1952	1946	1944	1951	901
35°	1632	1629	1624	1616	1620	1021
45°	1240	1231	1218	1196	1194	955
55°	841	824	803	782	776	750
65°	497	490	471	467	465	498
75°	270	264	258	270	280	288
85°	94	89	96	105	106	100
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2286.1	2286.1	2286.1	2286.1	2286.1
2.5°	2300.2	2288.3	2275.3	2275.3	2285.0
5°	2280.7	2280.7	2267.7	2268.8	2287.2
7.5°	2268.8	2262.2	2253.6	2253.6	2267.7
10°	2242.7	2237.3	2232.9	2230.8	2235.1
12.5°	2214.5	2205.8	2209.0	2205.8	2204.7
15°	2172.1	2167.8	2170.0	2168.9	2164.5
17.5°	2126.5	2124.4	2128.7	2121.1	2124.4
20°	2077.7	2071.2	2073.4	2069.0	2073.4
22.5°	2022.3	2018.0	2012.6	2007.1	2015.8
25°	1957.2	1951.8	1946.4	1944.2	1950.7
27.5°	1892.1	1883.4	1875.8	1873.6	1883.4
30°	1816.1	1806.3	1797.6	1795.5	1803.1
32.5°	1726.0	1723.8	1713.0	1708.6	1711.9
35°	1631.5	1629.4	1624.0	1616.4	1619.6
37.5°	1541.5	1540.4	1532.8	1519.7	1511.1
40°	1444.8	1437.2	1431.8	1413.4	1406.8
42.5°	1338.5	1336.3	1326.5	1305.9	1298.3
45°	1239.7	1231.0	1218.0	1196.3	1194.1
47.5°	1137.6	1125.7	1113.8	1086.6	1085.5
50°	1032.3	1023.7	1009.5	982.4	971.5
52.5°	934.6	922.7	903.2	877.1	871.7
55°	841.3	823.9	803.3	781.6	776.2
57.5°	741.4	733.8	708.8	691.5	685.0
60°	653.5	647.0	622.0	605.7	605.7
62.5°	574.2	564.5	542.8	531.9	531.9
65°	497.2	489.6	471.1	466.8	464.6
67.5°	431.0	421.2	408.2	407.1	412.5
70°	373.4	361.5	350.6	361.5	364.7
72.5°	319.1	311.5	301.8	315.9	322.4
75°	270.3	263.8	258.4	270.3	280.1
77.5°	225.8	219.3	219.3	232.3	241.0
80°	181.3	176.9	181.3	192.1	200.8
82.5°	138.9	135.7	141.1	152.0	157.4
85°	94.4	89.0	95.5	105.3	106.4
87.5°	44.5	43.4	47.8	54.3	53.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)