

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: P293129

Luminaire Tested: **24GR-LD5-56-F1-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293129
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-L92765-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: 5106.0 lumens
Efficiency: N/A
Efficacy: 128.6 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

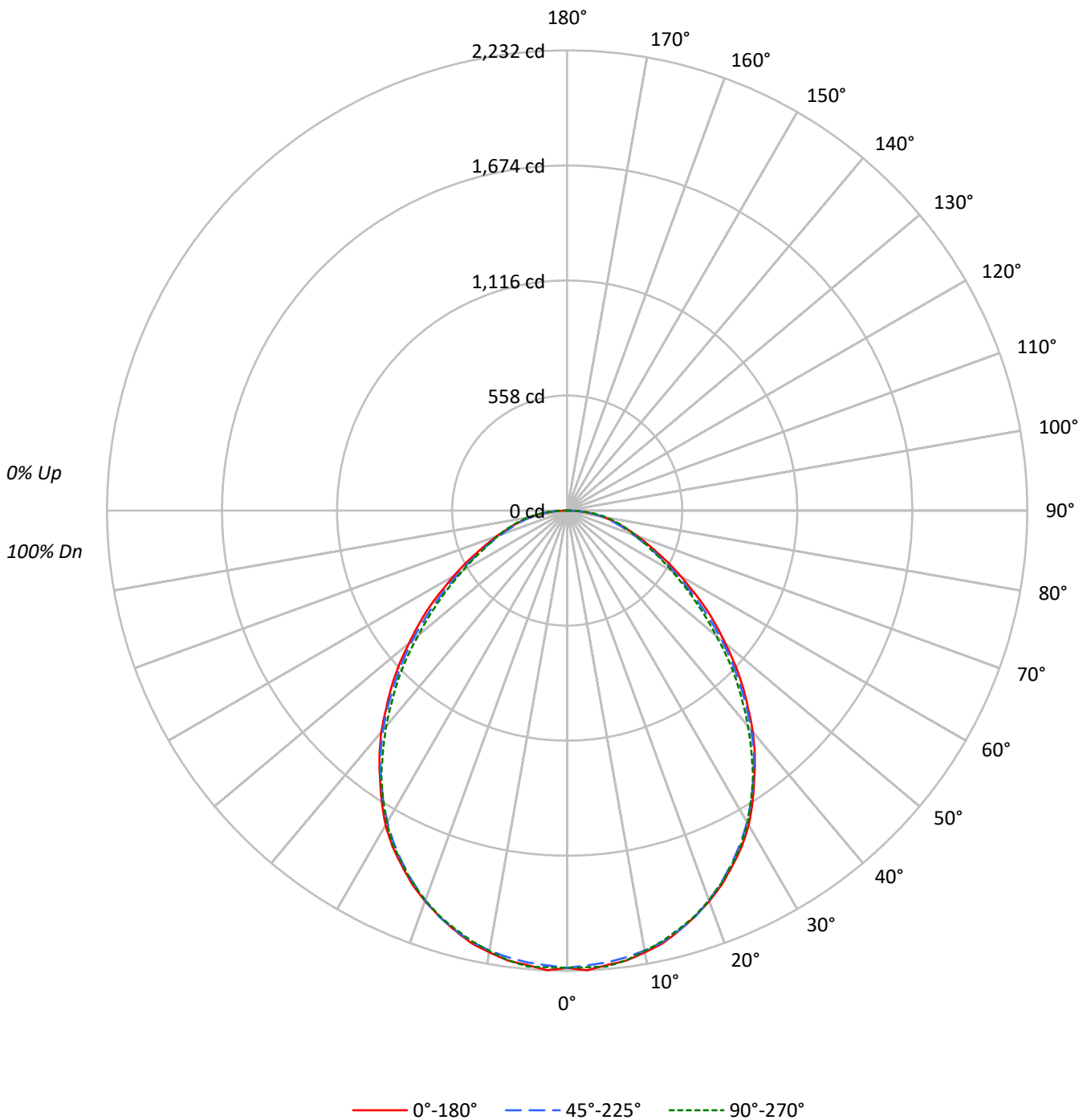
Input Watts (W): 39.711
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	0																			
RCR																																														
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																												
1	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85																												
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	72																												
3	92	82	74	68	90	81	73	68	78	72	67	75	70	65	72	68	64	62																												
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56	54																												
5	78	66	58	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47																												
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42																												
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37																												
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34																												
9	59	46	38	33	58	46	38	33	44	38	33	43	37	32	42	37	32	31																												
10	56	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2984	2984	2984
5°	2989	2971	2997
10°	2973	2960	2963
15°	2935	2932	2925
20°	2886	2880	2880
25°	2819	2803	2810
30°	2737	2710	2718
35°	2600	2588	2581
40°	2462	2440	2397
45°	2289	2248	2204
50°	2096	2050	1973
55°	1915	1828	1766
60°	1706	1624	1581
65°	1535	1455	1435
70°	1425	1338	1392
75°	1363	1303	1412
80°	1363	1363	1509
85°	1414	1431	1593



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	209.5	4.1
10°-20°	592.7	11.6
20°-30°	870.0	17.0
30°-40°	983.5	19.3
40°-50°	909.0	17.8
50°-60°	700.3	13.7
60°-70°	463.8	9.1
70°-80°	276.1	5.4
80°-90°	101.1	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°	1672.2	32.7
0°-40°	2655.7	52.0
0°-60°	4265.0	83.5
0°-90°	5106.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5106.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2218	2218	2218	2218	2218	
5°	2213	2213	2200	2201	2219	210
15°	2107	2103	2105	2104	2100	594
25°	1899	1894	1888	1886	1892	874
35°	1583	1581	1576	1568	1571	990
45°	1203	1194	1182	1161	1158	926
55°	816	799	779	758	753	728
65°	482	475	457	453	451	484
75°	262	256	251	262	272	280
85°	92	86	93	102	103	97
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2217.9	2217.9	2217.9	2217.9	2217.9
2.5°	2231.6	2220.0	2207.4	2207.4	2216.9
5°	2212.7	2212.7	2200.0	2201.1	2219.0
7.5°	2201.1	2194.8	2186.3	2186.3	2200.0
10°	2175.8	2170.5	2166.3	2164.2	2168.4
12.5°	2148.4	2140.0	2143.2	2140.0	2138.9
15°	2107.3	2103.1	2105.2	2104.2	2100.0
17.5°	2063.1	2061.0	2065.2	2057.8	2061.0
20°	2015.7	2009.4	2011.5	2007.3	2011.5
22.5°	1962.0	1957.8	1952.5	1947.3	1955.7
25°	1898.8	1893.6	1888.3	1886.2	1892.5
27.5°	1835.6	1827.2	1819.8	1817.7	1827.2
30°	1761.9	1752.4	1744.0	1741.9	1749.3
32.5°	1674.5	1672.4	1661.9	1657.7	1660.8
35°	1582.9	1580.8	1575.5	1568.1	1571.3
37.5°	1495.5	1494.4	1487.0	1474.4	1466.0
40°	1401.7	1394.4	1389.1	1371.2	1364.9
42.5°	1298.5	1296.4	1286.9	1266.9	1259.6
45°	1202.7	1194.3	1181.6	1160.6	1158.5
47.5°	1103.7	1092.1	1080.5	1054.2	1053.1
50°	1001.5	993.1	979.4	953.1	942.6
52.5°	906.8	895.2	876.2	850.9	845.7
55°	816.2	799.3	779.3	758.3	753.0
57.5°	719.3	711.9	687.7	670.9	664.5
60°	634.0	627.7	603.5	587.7	587.7
62.5°	557.1	547.6	526.6	516.0	516.0
65°	482.3	475.0	457.1	452.9	450.7
67.5°	418.1	408.6	396.0	394.9	400.2
70°	362.3	350.7	340.2	350.7	353.9
72.5°	309.6	302.3	292.8	306.5	312.8
75°	262.2	255.9	250.6	262.2	271.7
77.5°	219.1	212.7	212.7	225.4	233.8
80°	175.9	171.7	175.9	186.4	194.8
82.5°	134.8	131.6	136.9	147.4	152.7
85°	91.6	86.4	92.7	102.2	103.2
87.5°	43.2	42.1	46.3	52.7	51.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)