

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: P294194

Luminaire Tested: **24GR-LD5-56-FGW080-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294194  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-25)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-56-FGW080-UNV-L83050-W2A1-U-3000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4643.0 lumens  
Efficiency: N/A  
Efficacy: 119.4 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

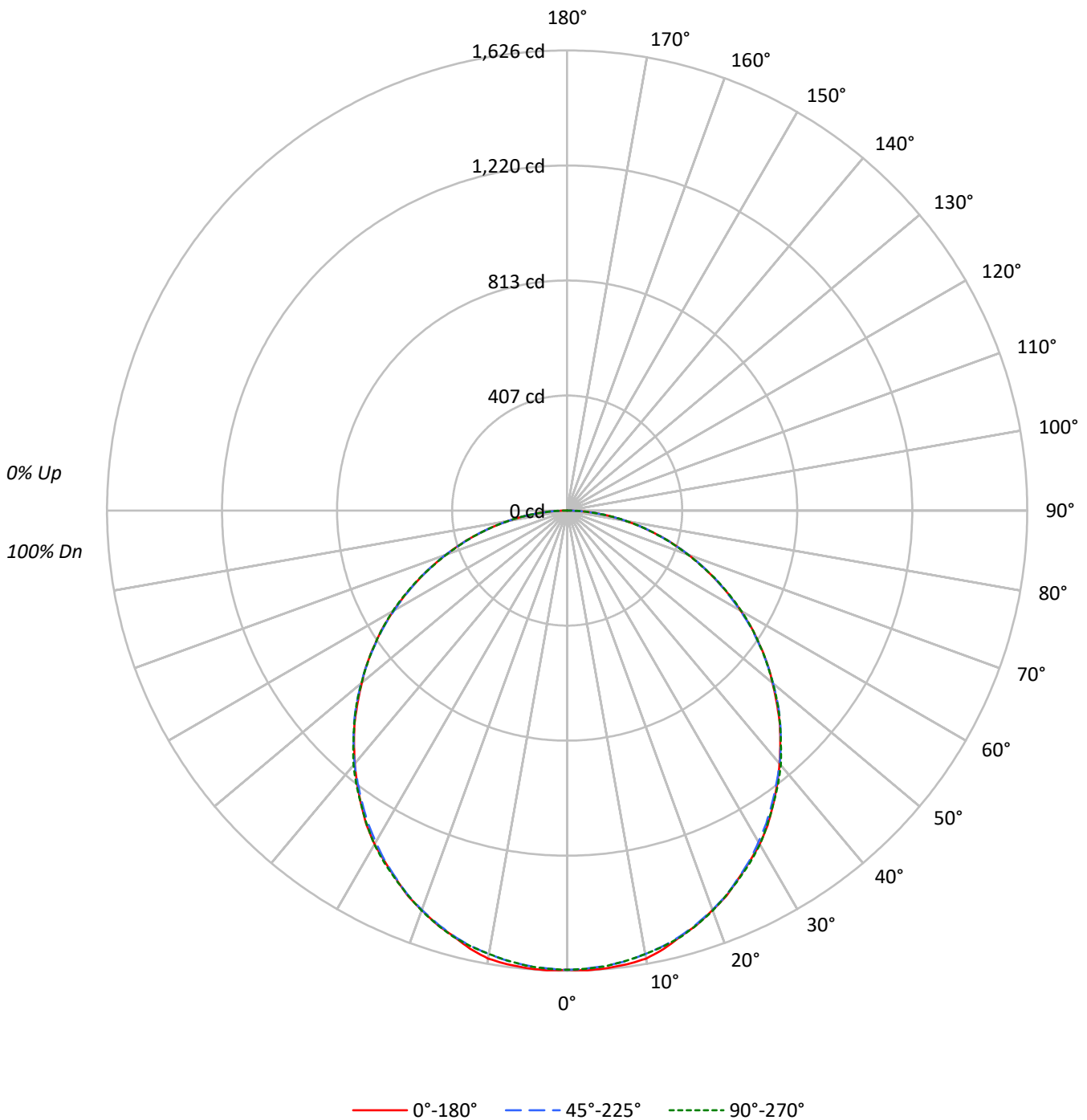
Input Watts (W): 38.874  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43					43			
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2183	2183	2183
5°	2192	2180	2181
10°	2196	2174	2174
15°	2167	2166	2170
20°	2151	2149	2154
25°	2128	2126	2133
30°	2115	2101	2116
35°	2085	2074	2085
40°	2050	2052	2064
45°	2021	2027	2023
50°	1983	1990	1985
55°	1952	1947	1952
60°	1907	1901	1918
65°	1848	1855	1862
70°	1788	1796	1783
75°	1725	1725	1725
80°	1629	1629	1646
85°	1505	1521	1471



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	153.4	3.3
10°-20°	438.6	9.4
20°-30°	661.0	14.2
30°-40°	791.7	17.1
40°-50°	819.6	17.7
50°-60°	743.1	16.0
60°-70°	576.1	12.4
70°-80°	350.4	7.5
80°-90°	109.0	2.3
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°	1253.1	27.0
0°-40°	2044.9	44.0
0°-60°	3607.5	77.7
0°-90°	4643.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4643.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1623	1623	1623	1623	1623	
5°	1623	1613	1614	1612	1615	154
15°	1556	1557	1555	1549	1558	440
25°	1433	1433	1432	1437	1437	662
35°	1269	1260	1262	1268	1269	794
45°	1062	1064	1065	1061	1063	818
55°	832	828	830	833	832	744
65°	580	584	582	580	585	576
75°	332	331	332	331	332	350
85°	98	96	98	98	95	109
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1622.8	1622.8	1622.8	1622.8	1622.8
2.5°	1626.1	1619.5	1619.5	1617.3	1620.6
5°	1622.8	1612.9	1614.0	1611.8	1615.1
7.5°	1617.3	1604.2	1605.3	1603.1	1604.2
10°	1607.5	1592.1	1591.0	1589.9	1591.0
12.5°	1585.6	1576.8	1575.7	1573.5	1576.8
15°	1556.0	1557.1	1554.9	1549.4	1558.2
17.5°	1533.0	1531.9	1529.7	1524.2	1533.0
20°	1502.3	1503.4	1501.2	1499.0	1504.5
22.5°	1472.8	1469.5	1470.6	1469.5	1470.6
25°	1433.3	1433.3	1432.3	1436.6	1436.6
27.5°	1397.2	1392.8	1395.0	1399.4	1401.6
30°	1361.1	1350.1	1352.3	1356.7	1362.2
32.5°	1318.4	1307.4	1309.6	1314.0	1316.2
35°	1269.1	1260.3	1262.5	1268.0	1269.1
37.5°	1218.7	1213.3	1215.4	1219.8	1223.1
40°	1167.3	1165.1	1168.4	1167.3	1174.9
42.5°	1114.7	1113.6	1116.9	1116.9	1118.0
45°	1062.1	1064.3	1065.4	1061.0	1063.2
47.5°	1004.1	1005.2	1009.6	1007.4	1008.5
50°	947.2	946.1	950.5	951.6	948.3
52.5°	892.4	886.9	891.3	893.5	891.3
55°	832.2	827.8	830.0	833.3	832.2
57.5°	773.1	768.7	769.8	775.3	773.1
60°	708.5	707.4	706.3	710.7	712.8
62.5°	645.0	643.9	641.7	646.0	648.2
65°	580.3	583.6	582.5	580.3	584.7
67.5°	519.0	522.3	519.0	516.8	516.8
70°	454.4	457.7	456.6	454.4	453.3
72.5°	394.2	394.2	392.0	390.9	392.0
75°	331.8	330.7	331.8	330.7	331.8
77.5°	270.5	271.6	271.6	271.6	270.5
80°	210.2	210.2	210.2	211.3	212.4
82.5°	154.4	151.1	154.4	152.2	153.3
85°	97.5	96.4	98.5	97.5	95.3
87.5°	43.8	44.9	44.9	46.0	46.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)