

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: P293564

Luminaire Tested: **24GR-LD5-56-A-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293564  
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-LD5-56-A-UNV-L93050-W2A1-U-3000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4435.0 lumens  
Efficiency: N/A  
Efficacy: 111.3 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

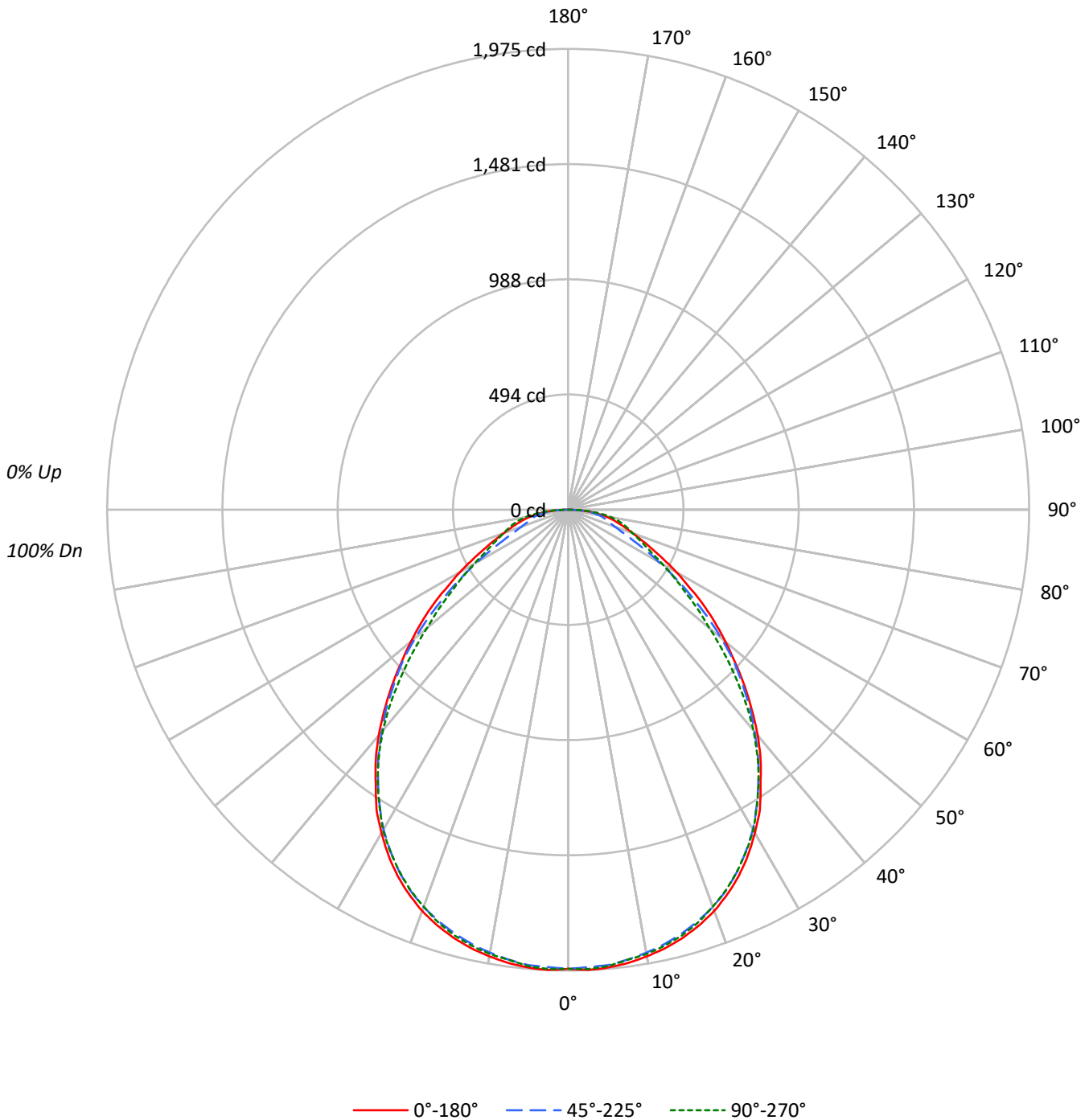
Input Watts (W): 39.863241  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63
4	86	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	73	61	53	46	72	60	52	46	58	51	46	57	50	45	55	49	45	43
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	38	33	32
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	30	29

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

	0°	45°	90°
0°	2648	2648	2648
5°	2660	2646	2652
10°	2656	2634	2642
15°	2645	2619	2630
20°	2620	2594	2593
25°	2569	2542	2540
30°	2484	2459	2464
35°	2360	2333	2336
40°	2219	2181	2167
45°	2034	2006	1927
50°	1839	1788	1654
55°	1651	1503	1426
60°	1446	1210	1254
65°	1261	951	1154
70°	1153	830	1153
75°	1154	883	1272
80°	1253	1041	1449
85°	1376	1175	1555



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	186.3	4.2
10°-20°	531.8	12.0
20°-30°	788.5	17.8
30°-40°	889.5	20.1
40°-50°	805.7	18.2
50°-60°	581.2	13.1
60°-70°	347.0	7.8
70°-80°	214.5	4.8
80°-90°	90.4	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°	1506.6	34.0
0°-40°	2396.2	54.0
0°-60°	3783.1	85.3
0°-90°	4435.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4435.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1968	1968	1968	1968	1968	
5°	1970	1967	1959	1957	1964	187
15°	1899	1888	1880	1881	1888	535
25°	1731	1721	1712	1706	1711	795
35°	1437	1435	1420	1421	1422	899
45°	1069	1062	1054	1028	1013	824
55°	704	682	641	609	608	628
65°	396	349	299	339	362	398
75°	222	192	170	212	245	237
85°	89	78	76	99	101	93
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1967.8	1967.8	1967.8	1967.8	1967.8
2.5°	1974.6	1969.1	1962.3	1966.4	1969.8
5°	1969.8	1967.1	1958.9	1956.8	1963.6
7.5°	1959.5	1952.7	1945.1	1948.6	1945.8
10°	1943.8	1937.6	1928.0	1928.7	1933.5
12.5°	1924.6	1917.1	1906.8	1909.5	1913.6
15°	1899.2	1887.6	1880.1	1880.7	1888.3
17.5°	1867.0	1858.1	1848.5	1850.6	1854.0
20°	1830.0	1825.2	1811.5	1807.4	1810.9
22.5°	1783.5	1774.5	1767.0	1765.0	1765.6
25°	1730.7	1721.1	1712.2	1706.0	1710.8
27.5°	1669.0	1660.8	1649.2	1647.1	1651.2
30°	1599.1	1593.0	1582.7	1580.0	1586.1
32.5°	1527.9	1517.6	1503.2	1503.2	1504.6
35°	1436.8	1434.7	1420.3	1421.0	1422.4
37.5°	1354.5	1345.0	1336.7	1328.5	1332.6
40°	1263.4	1252.5	1241.5	1236.0	1234.0
42.5°	1165.4	1157.2	1152.4	1132.6	1127.8
45°	1068.8	1062.0	1054.4	1028.4	1012.7
47.5°	970.2	968.8	962.6	916.7	901.0
50°	878.4	876.3	854.4	805.7	790.0
52.5°	791.4	777.6	748.9	700.9	698.2
55°	703.7	681.7	640.6	609.1	607.7
57.5°	611.2	585.1	543.3	526.2	535.1
60°	537.2	497.4	449.5	451.5	465.9
62.5°	460.4	415.9	368.6	389.2	406.3
65°	396.0	348.7	298.7	339.2	362.4
67.5°	339.8	296.0	248.0	302.2	324.8
70°	293.2	257.6	211.0	267.9	293.2
72.5°	256.2	223.4	187.0	240.5	270.0
75°	222.0	192.5	169.9	211.7	244.6
77.5°	192.5	163.8	153.5	187.0	219.2
80°	161.7	135.7	134.3	163.1	187.0
82.5°	126.1	108.3	108.3	136.3	150.7
85°	89.1	78.1	76.1	99.3	100.7
87.5°	45.9	43.8	39.7	52.1	52.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)