

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: P293932

Luminaire Tested: **24GR-LD5-42-A19/156-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293932
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33308)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-42-A19/156-UNV-L83050-W2A1-U-3000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3855.0 lumens
Efficiency: N/A
Efficacy: 138.2 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.25
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

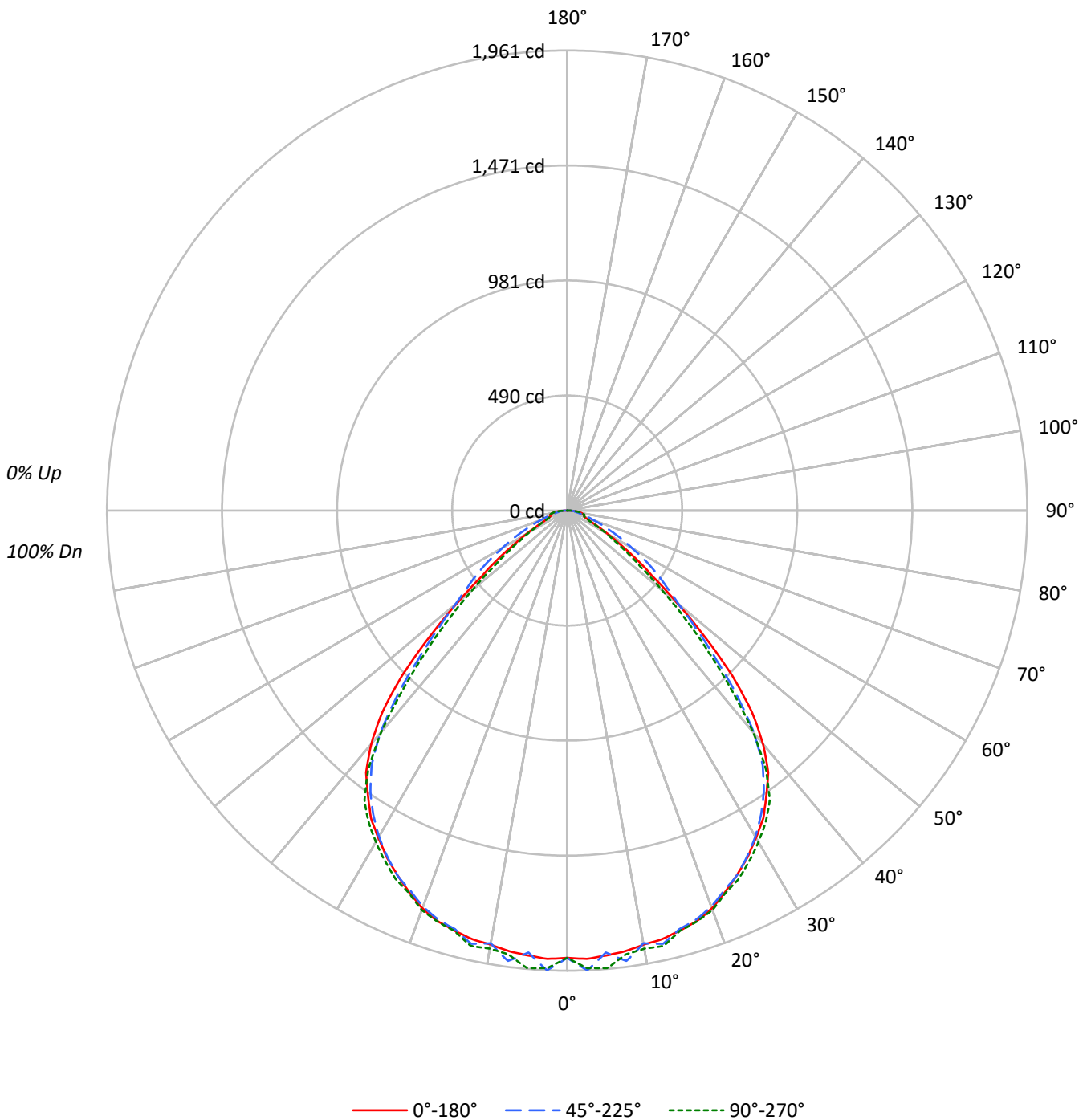
Input Watts (W): 27.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	111	107	103	100	108	105	102	99	101	98	96		97	95	93		93	92	90	88
2	103	96	90	86	100	94	89	85	91	86	83		88	84	81		85	82	79	77
3	95	86	79	74	93	85	78	73	82	77	72		79	75	71		77	73	70	68
4	88	78	71	65	86	77	70	64	74	68	64		72	67	63		70	66	62	60
5	82	71	63	57	80	70	62	57	68	61	56		66	60	56		64	59	55	53
6	76	65	57	51	75	64	56	51	62	55	50		60	55	50		59	54	50	48
7	71	59	51	46	70	58	51	46	57	50	45		56	50	45		54	49	45	43
8	67	55	47	42	65	54	47	41	53	46	41		51	45	41		50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38		48	42	37		47	41	37	36
10	59	47	39	35	58	46	39	35	45	39	34		44	38	34		44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2565	2565	2565
5°	2570	2554	2644
10°	2566	2559	2590
15°	2581	2573	2583
20°	2583	2572	2594
25°	2543	2545	2570
30°	2501	2493	2534
35°	2430	2401	2473
40°	2282	2180	2168
45°	1892	1712	1623
50°	1272	1298	1109
55°	839	1089	728
60°	538	860	498
65°	347	656	337
70°	307	470	307
75°	396	373	399
80°	484	322	508
85°	563	479	593



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.5	4.7
10°-20°	524.1	13.6
20°-30°	789.0	20.5
30°-40°	914.5	23.7
40°-50°	714.3	18.5
50°-60°	381.4	9.9
60°-70°	196.2	5.1
70°-80°	110.9	2.9
80°-90°	42.1	1.1
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°	1495.5	38.8
0°-40°	2410.0	62.5
0°-60°	3505.8	90.9
0°-90°	3855.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3855.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1906	1906	1906	1906	1906	
5°	1903	1956	1891	1943	1958	181
15°	1853	1865	1847	1858	1854	523
25°	1713	1708	1714	1712	1731	789
35°	1480	1473	1462	1491	1506	922
45°	994	995	900	892	853	749
55°	358	453	464	418	310	330
65°	109	227	206	227	106	120
75°	76	143	72	134	77	77
85°	36	48	31	48	38	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1906.2	1906.2	1906.2	1906.2	1906.2
2.5°	1912.4	1947.0	1960.7	1944.0	1951.4
5°	1903.1	1956.3	1890.7	1942.7	1957.6
7.5°	1894.4	1888.9	1936.5	1887.0	1908.0
10°	1878.3	1882.0	1872.8	1908.0	1895.7
12.5°	1870.9	1892.6	1890.7	1872.8	1900.0
15°	1852.9	1864.7	1846.8	1858.5	1854.2
17.5°	1835.0	1829.4	1827.6	1832.5	1836.8
20°	1804.0	1785.5	1796.6	1797.8	1811.5
22.5°	1759.5	1748.3	1750.8	1761.9	1763.2
25°	1713.0	1707.5	1714.3	1711.8	1731.0
27.5°	1664.7	1657.3	1661.6	1670.9	1682.7
30°	1609.6	1607.8	1604.7	1612.7	1630.7
32.5°	1555.2	1540.3	1537.8	1554.5	1575.0
35°	1479.6	1472.8	1461.7	1490.8	1505.6
37.5°	1407.8	1386.8	1368.8	1386.1	1392.3
40°	1299.5	1283.4	1241.3	1243.1	1234.5
42.5°	1166.4	1154.6	1074.1	1059.9	1035.7
45°	994.3	994.9	899.5	891.5	853.1
47.5°	794.3	829.6	746.6	737.3	680.4
50°	607.9	671.7	620.3	605.5	529.9
52.5°	456.3	549.8	533.7	501.5	397.5
55°	357.8	452.6	464.3	418.5	310.2
57.5°	269.3	372.7	391.9	354.1	239.6
60°	200.0	313.9	319.5	304.6	185.1
62.5°	148.6	266.8	259.4	261.3	137.4
65°	109.0	227.2	206.2	226.6	105.9
67.5°	89.1	196.9	160.3	196.3	86.1
70°	78.0	174.6	119.5	172.7	78.0
72.5°	75.5	160.3	94.7	153.5	76.1
75°	76.1	143.0	71.8	133.7	76.8
77.5°	70.0	117.6	54.5	113.9	73.1
80°	62.5	89.1	41.5	90.4	65.6
82.5°	53.2	65.0	33.4	66.9	55.1
85°	36.5	47.7	31.0	47.7	38.4
87.5°	17.3	28.5	19.2	27.2	19.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)