

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: P293985

Luminaire Tested: **24GR-LD5-38-A19/156-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293985
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-LD5-38-A19/156-UNV-L82765-W2A1-U-5000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3856.0 lumens
Efficiency: N/A
Efficacy: 148.6 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

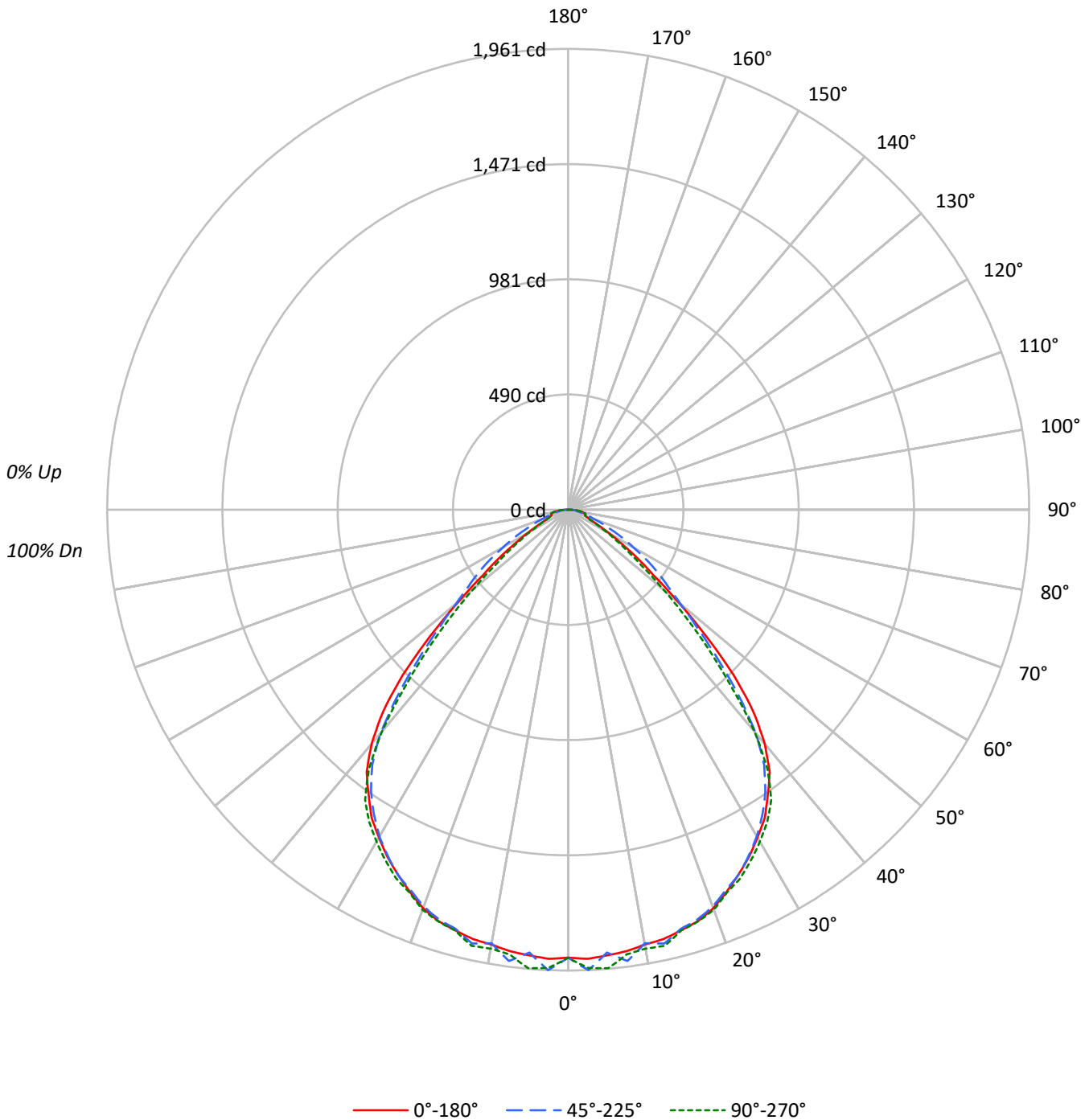
Input Watts (W): 25.947
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2565	2565	2565
5°	2571	2554	2645
10°	2567	2559	2591
15°	2582	2573	2584
20°	2584	2573	2594
25°	2544	2546	2570
30°	2502	2494	2534
35°	2431	2402	2474
40°	2283	2181	2169
45°	1892	1712	1624
50°	1273	1299	1110
55°	840	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°	182.6	4.7
10°-20°	524.2	13.6
20°-30°	789.2	20.5
30°-40°	914.7	23.7
40°-50°	714.5	18.5
50°-60°	381.5	9.9
60°-70°	196.2	5.1
70°-80°	111.0	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°	1495.9	38.8
0°-40°	2410.6	62.5
0°-60°	3506.7	90.9
0°-90°	3856.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3856.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1907	1907	1907	1907	1907	
5°	1904	1957	1891	1943	1958	181
15°	1853	1865	1847	1859	1855	523
25°	1714	1708	1715	1712	1731	790
35°	1480	1473	1462	1491	1506	923
45°	994	995	900	892	853	749
55°	358	453	464	419	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°	1906.7	1906.7	1906.7	1906.7	1906.7
2.5°	1912.9	1947.6	1961.2	1944.5	1951.9
5°	1903.6	1956.8	1891.2	1943.2	1958.1
7.5°	1894.9	1889.3	1937.0	1887.5	1908.5
10°	1878.8	1882.5	1873.2	1908.5	1896.2
12.5°	1871.4	1893.1	1891.2	1873.2	1900.5
15°	1853.4	1865.2	1847.2	1859.0	1854.7
17.5°	1835.5	1829.9	1828.0	1833.0	1837.3
20°	1804.5	1785.9	1797.1	1798.3	1811.9
22.5°	1759.9	1748.8	1751.2	1762.4	1763.6
25°	1713.5	1707.9	1714.7	1712.2	1731.4
27.5°	1665.2	1657.7	1662.1	1671.4	1683.1
30°	1610.1	1608.2	1605.1	1613.2	1631.1
32.5°	1555.6	1540.7	1538.2	1554.9	1575.4
35°	1480.0	1473.2	1462.1	1491.2	1506.0
37.5°	1408.2	1387.1	1369.2	1386.5	1392.7
40°	1299.8	1283.7	1241.6	1243.5	1234.8
42.5°	1166.7	1154.9	1074.4	1060.2	1036.0
45°	994.5	995.1	899.8	891.7	853.3
47.5°	794.5	829.8	746.8	737.5	680.6
50°	608.1	671.9	620.5	605.6	530.1
52.5°	456.4	549.9	533.8	501.6	397.6
55°	357.9	452.7	464.4	418.6	310.2
57.5°	269.4	372.8	392.0	354.2	239.7
60°	200.0	314.0	319.5	304.7	185.2
62.5°	148.6	266.9	259.5	261.3	137.5
65°	109.0	227.3	206.2	226.6	105.9
67.5°	89.2	196.9	160.4	196.3	86.1
70°	78.0	174.6	119.5	172.8	78.0
72.5°	75.5	160.4	94.7	153.6	76.2
75°	76.2	143.0	71.8	133.8	76.8
77.5°	70.0	117.7	54.5	113.9	73.1
80°	62.5	89.2	41.5	90.4	65.6
82.5°	53.3	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)