

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: P293987

Luminaire Tested: **24GR-LD5-38-A19/156-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293987
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-5700K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3905.0 lumens
Efficiency: N/A
Efficacy: 149.4 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

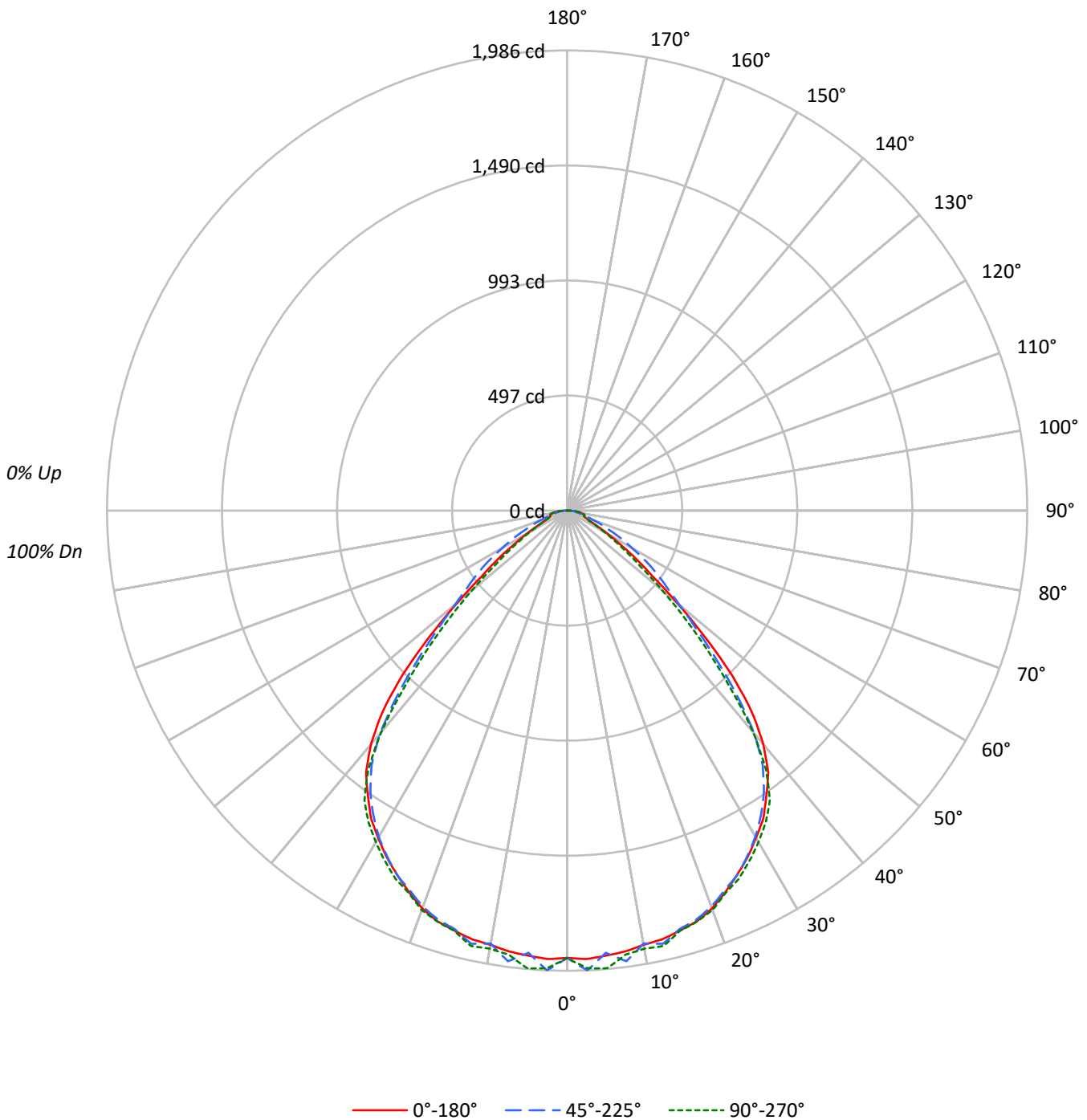
Input Watts (W): 26.133
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2598	2598	2598
5°	2604	2587	2678
10°	2600	2592	2623
15°	2615	2606	2616
20°	2617	2606	2627
25°	2576	2578	2603
30°	2533	2525	2566
35°	2462	2432	2505
40°	2312	2209	2196
45°	1917	1734	1644
50°	1289	1315	1124
55°	850	1103	737
60°	545	871	505
65°	351	665	341
70°	311	476	311
75°	401	378	404
80°	490	325	515
85°	571	485	601



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.9	4.7
10°-20°	530.9	13.6
20°-30°	799.2	20.5
30°-40°	926.3	23.7
40°-50°	723.6	18.5
50°-60°	386.4	9.9
60°-70°	198.7	5.1
70°-80°	112.4	2.9
80°-90°	42.7	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°	1514.9	38.8
0°-40°	2441.2	62.5
0°-60°	3551.2	90.9
0°-90°	3905.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3905.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1931	1931	1931	1931	1931	
5°	1928	1982	1915	1968	1983	183
15°	1877	1889	1871	1883	1878	530
25°	1735	1730	1736	1734	1753	800
35°	1499	1492	1481	1510	1525	934
45°	1007	1008	911	903	864	759
55°	362	458	470	424	314	335
65°	110	230	209	230	107	121
75°	77	145	73	136	78	78
85°	37	48	31	48	39	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1930.9	1930.9	1930.9	1930.9	1930.9
2.5°	1937.2	1972.3	1986.1	1969.2	1976.7
5°	1927.8	1981.7	1915.2	1967.9	1983.0
7.5°	1919.0	1913.4	1961.6	1911.5	1932.8
10°	1902.7	1906.5	1897.0	1932.8	1920.2
12.5°	1895.2	1917.1	1915.2	1897.0	1924.6
15°	1877.0	1888.9	1870.7	1882.6	1878.2
17.5°	1858.8	1853.1	1851.3	1856.3	1860.7
20°	1827.4	1808.6	1819.9	1821.2	1835.0
22.5°	1782.3	1771.0	1773.5	1784.8	1786.0
25°	1735.2	1729.6	1736.5	1734.0	1753.4
27.5°	1686.3	1678.8	1683.2	1692.6	1704.5
30°	1630.5	1628.6	1625.5	1633.7	1651.8
32.5°	1575.3	1560.3	1557.8	1574.7	1595.4
35°	1498.8	1491.9	1480.6	1510.1	1525.2
37.5°	1426.1	1404.8	1386.6	1404.1	1410.4
40°	1316.3	1300.0	1257.4	1259.3	1250.5
42.5°	1181.5	1169.6	1088.1	1073.6	1049.2
45°	1007.2	1007.8	911.2	903.1	864.2
47.5°	804.6	840.3	756.3	746.9	689.2
50°	615.8	680.4	628.4	613.3	536.8
52.5°	462.2	556.9	540.6	508.0	402.6
55°	362.5	458.4	470.3	423.9	314.2
57.5°	272.8	377.5	397.0	358.7	242.7
60°	202.6	318.0	323.6	308.5	187.5
62.5°	150.5	270.3	262.8	264.6	139.2
65°	110.4	230.2	208.8	229.5	107.2
67.5°	90.3	199.4	162.4	198.8	87.2
70°	79.0	176.8	121.0	175.0	79.0
72.5°	76.5	162.4	95.9	155.5	77.1
75°	77.1	144.9	72.7	135.5	77.8
77.5°	70.9	119.2	55.2	115.4	74.0
80°	63.3	90.3	42.0	91.6	66.5
82.5°	53.9	65.8	33.9	67.7	55.8
85°	37.0	48.3	31.4	48.3	38.9
87.5°	17.6	28.8	19.4	27.6	20.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)