

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: P219224

Luminaire Tested: **24GR-LD5-56-A19/156-UNV-L935-CD1-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P219224
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33306)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/12/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-56-A19/156-UNV-L935-CD1-U
Description: METALUX GR 2X4 LED TROFFER WITH A19/156 LENS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4647.7 lumens
Efficiency: N/A
Efficacy: 102.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.26
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

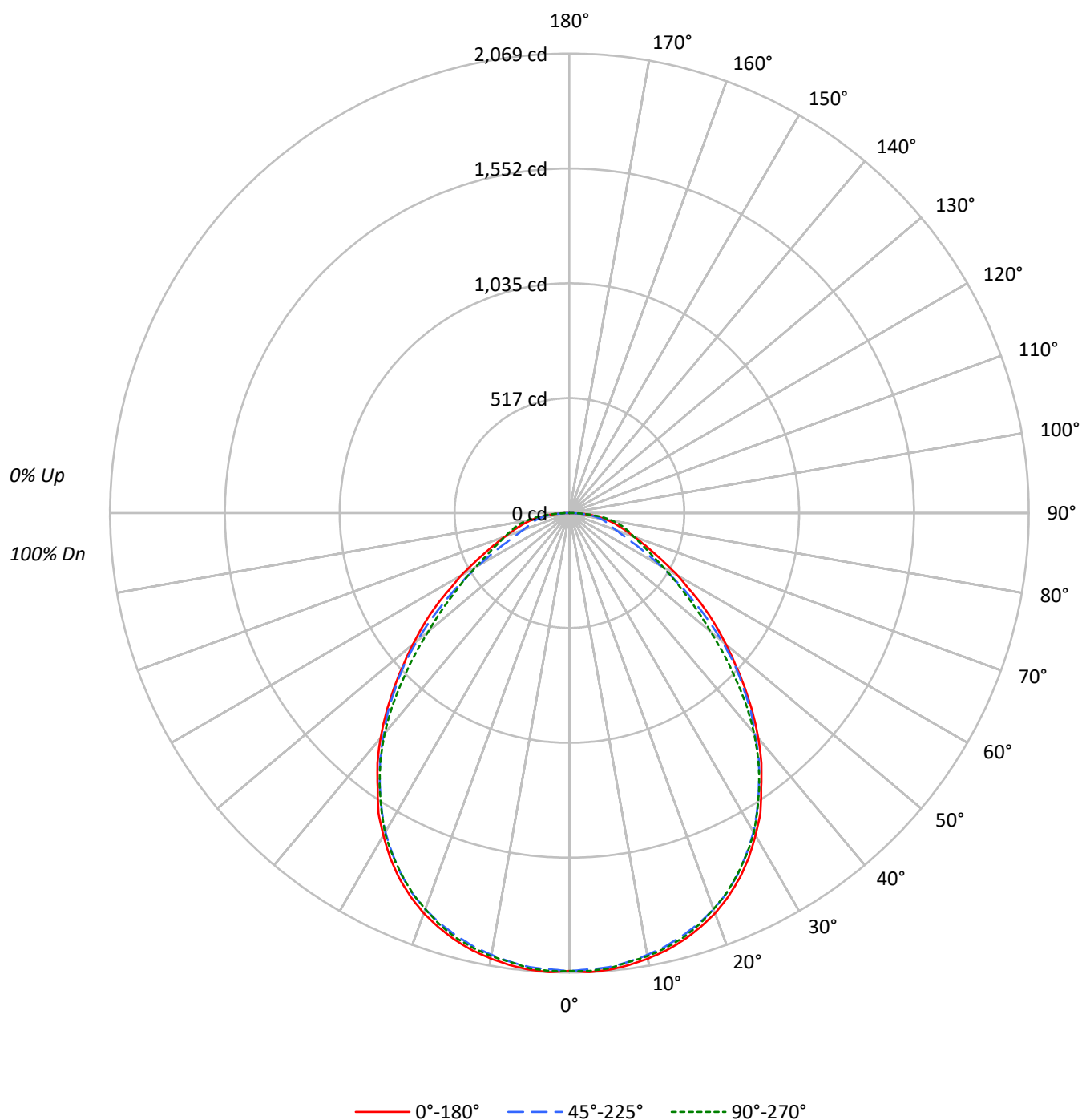
Input Watts (W): 45.182
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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°	3158	3158	3158
5°	3174	3156	3164
10°	3168	3142	3151
15°	3156	3124	3138
20°	3126	3094	3093
25°	3065	3032	3030
30°	2964	2933	2940
35°	2815	2783	2787
40°	2647	2601	2585
45°	2426	2393	2299
50°	2193	2134	1973
55°	1969	1793	1701
60°	1725	1443	1495
65°	1504	1135	1377
70°	1376	991	1376
75°	1376	1054	1517
80°	1495	1242	1729
85°	1640	1401	1856



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.3	4.2
10°-20°	557.3	12.0
20°-30°	826.3	17.8
30°-40°	932.2	20.1
40°-50°	844.3	18.2
50°-60°	609.1	13.1
60°-70°	363.7	7.8
70°-80°	224.8	4.8
80°-90°	94.7	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°	1578.9	34.0
0°-40°	2511.1	54.0
0°-60°	3964.5	85.3
0°-90°	4647.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4647.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2062	2062	2062	2062	2062	
5°	2064	2061	2053	2051	2058	196
15°	1990	1978	1970	1971	1979	561
25°	1814	1804	1794	1788	1793	833
35°	1506	1504	1488	1489	1491	942
45°	1120	1113	1105	1078	1061	863
55°	737	714	671	638	637	658
65°	415	366	313	355	380	417
75°	233	202	178	222	256	248
85°	93	82	80	104	106	98
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2062.1	2062.1	2062.1	2062.1	2062.1
2.5°	2069.3	2063.5	2056.4	2060.7	2064.3
5°	2064.3	2061.4	2052.8	2050.6	2057.8
7.5°	2053.5	2046.3	2038.4	2042.0	2039.2
10°	2037.0	2030.6	2020.4	2021.2	2026.2
12.5°	2016.9	2009.0	1998.2	2001.1	2005.4
15°	1990.3	1978.1	1970.2	1970.9	1978.8
17.5°	1956.5	1947.3	1937.2	1939.4	1942.9
20°	1917.8	1912.8	1898.4	1894.1	1897.7
22.5°	1869.0	1859.6	1851.7	1849.6	1850.3
25°	1813.6	1803.6	1794.3	1787.8	1792.9
27.5°	1749.0	1740.5	1728.2	1726.1	1730.4
30°	1675.9	1669.4	1658.6	1655.7	1662.2
32.5°	1601.1	1590.4	1575.3	1575.3	1576.8
35°	1505.7	1503.5	1488.4	1489.1	1490.6
37.5°	1419.5	1409.5	1400.8	1392.2	1396.6
40°	1324.0	1312.5	1301.0	1295.3	1293.1
42.5°	1221.4	1212.7	1207.7	1186.9	1181.8
45°	1120.1	1112.9	1105.0	1077.7	1061.2
47.5°	1016.7	1015.2	1008.8	960.7	944.2
50°	920.5	918.3	895.4	844.4	827.9
52.5°	829.3	815.0	784.8	734.5	731.7
55°	737.4	714.4	671.3	638.4	636.9
57.5°	640.5	613.2	569.4	551.4	560.7
60°	563.0	521.3	471.0	473.2	488.2
62.5°	482.5	435.8	386.3	407.8	425.8
65°	415.0	365.5	313.1	355.4	379.9
67.5°	356.2	310.2	259.9	316.6	340.3
70°	307.3	270.0	221.2	280.8	307.3
72.5°	268.5	234.1	196.0	252.0	282.9
75°	232.6	201.8	178.1	221.8	256.4
77.5°	201.8	171.6	160.8	196.0	229.8
80°	169.5	142.2	140.8	170.8	196.0
82.5°	132.1	113.5	113.5	142.9	157.9
85°	93.3	81.9	79.7	104.1	105.6
87.5°	48.1	46.0	41.6	54.6	54.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)