

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: P219253

Luminaire Tested: **24GR-LD5-48-A19/156-UNV-L950-CD1-U**

Issue Date: 3/12/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P219253  
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-LD5-48-A19/156-UNV-L950-CD1-U  
Description: METALUX GR 2X4 LED TROFFER WITH A19/156 LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4342.2 lumens  
Efficiency: N/A  
Efficacy: 115.8 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

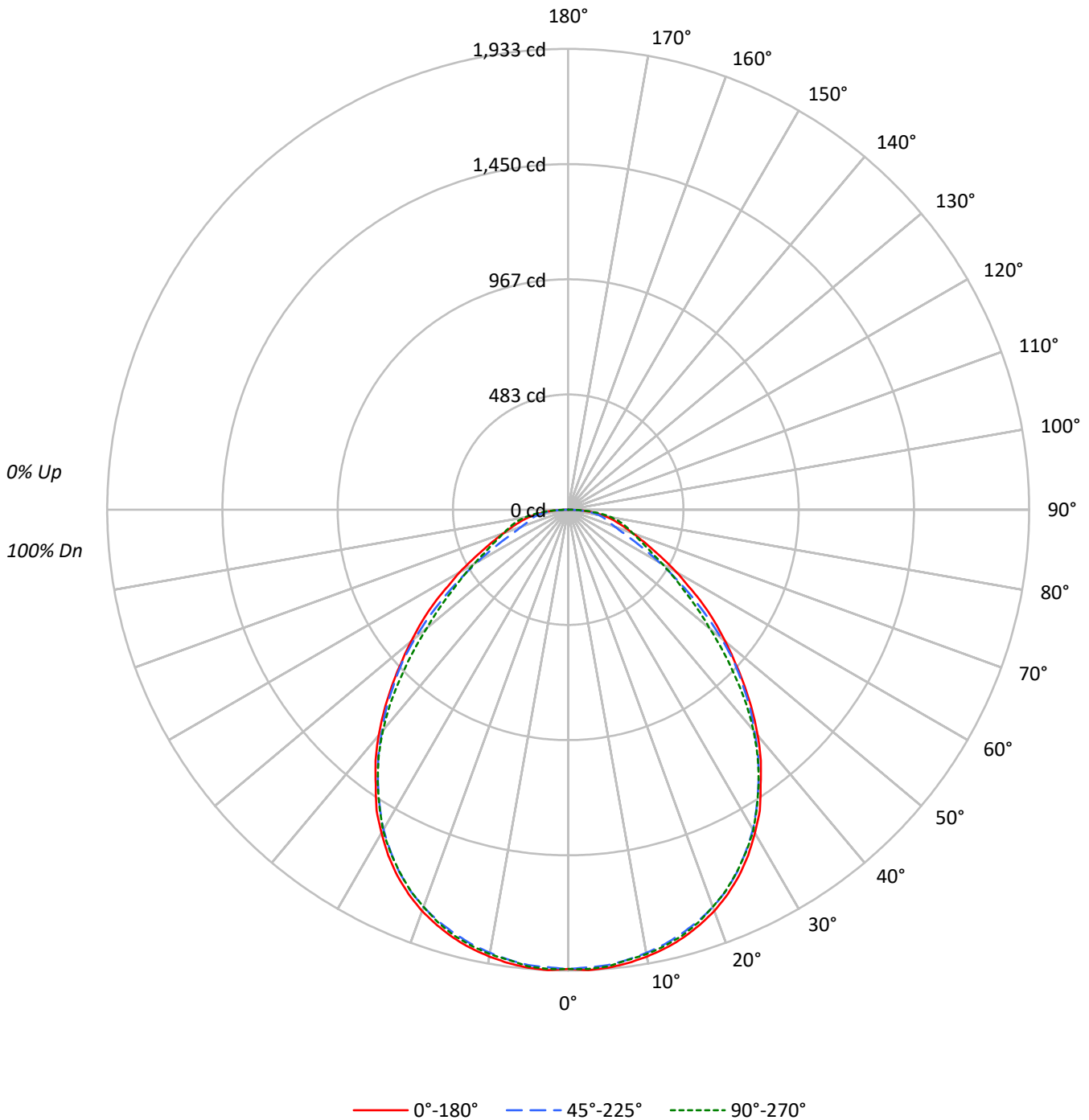
Input Watts (W): 37.486  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	2951	2951	2951
5°	2965	2949	2956
10°	2960	2936	2944
15°	2949	2919	2932
20°	2920	2891	2890
25°	2864	2833	2831
30°	2769	2741	2746
35°	2630	2600	2604
40°	2473	2430	2415
45°	2267	2236	2147
50°	2049	1993	1843
55°	1840	1675	1589
60°	1611	1348	1397
65°	1405	1060	1286
70°	1286	925	1286
75°	1286	984	1417
80°	1396	1160	1615
85°	1532	1307	1733



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	182.4	4.2
10°-20°	520.7	12.0
20°-30°	772.0	17.8
30°-40°	870.9	20.1
40°-50°	788.8	18.2
50°-60°	569.1	13.1
60°-70°	339.8	7.8
70°-80°	210.0	4.8
80°-90°	88.5	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°	1475.1	34.0
0°-40°	2346.1	54.0
0°-60°	3703.9	85.3
0°-90°	4342.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4342.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1927	1927	1927	1927	1927	
5°	1929	1926	1918	1916	1923	183
15°	1860	1848	1841	1841	1849	524
25°	1694	1685	1676	1670	1675	778
35°	1407	1405	1391	1391	1393	880
45°	1046	1040	1032	1007	991	806
55°	689	668	627	596	595	615
65°	388	341	292	332	355	390
75°	217	188	166	207	240	232
85°	87	76	74	97	99	91
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1926.6	1926.6	1926.6	1926.6	1926.6
2.5°	1933.3	1927.9	1921.2	1925.3	1928.6
5°	1928.6	1925.9	1917.9	1915.8	1922.6
7.5°	1918.6	1911.8	1904.4	1907.8	1905.1
10°	1903.1	1897.1	1887.7	1888.3	1893.1
12.5°	1884.3	1877.0	1866.9	1869.6	1873.6
15°	1859.5	1848.1	1840.7	1841.4	1848.8
17.5°	1828.0	1819.3	1809.9	1811.9	1815.3
20°	1791.8	1787.1	1773.7	1769.6	1773.0
22.5°	1746.1	1737.5	1730.0	1728.0	1728.7
25°	1694.5	1685.1	1676.4	1670.3	1675.0
27.5°	1634.1	1626.1	1614.7	1612.6	1616.7
30°	1565.7	1559.6	1549.6	1546.9	1552.9
32.5°	1495.9	1485.8	1471.7	1471.7	1473.1
35°	1406.7	1404.7	1390.6	1391.3	1392.7
37.5°	1326.2	1316.9	1308.8	1300.8	1304.8
40°	1237.0	1226.2	1215.5	1210.1	1208.1
42.5°	1141.0	1133.0	1128.3	1108.8	1104.2
45°	1046.5	1039.8	1032.4	1006.9	991.4
47.5°	949.9	948.6	942.5	897.5	882.2
50°	860.0	857.9	836.5	788.9	773.5
52.5°	774.8	761.4	733.2	686.2	683.6
55°	689.0	667.5	627.2	596.3	595.0
57.5°	598.4	572.8	532.0	515.2	523.9
60°	525.9	487.0	440.1	442.1	456.2
62.5°	450.8	407.2	360.9	381.0	397.8
65°	387.8	341.4	292.5	332.1	354.9
67.5°	332.7	289.8	242.9	295.8	318.0
70°	287.1	252.3	206.6	262.3	287.1
72.5°	250.9	218.7	183.1	235.4	264.3
75°	217.3	188.5	166.3	207.3	239.5
77.5°	188.5	160.3	150.2	183.1	214.7
80°	158.3	132.9	131.5	159.6	183.1
82.5°	123.4	106.0	106.0	133.5	147.6
85°	87.2	76.4	74.4	97.3	98.6
87.5°	45.0	43.0	38.9	51.0	51.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)