

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: P219239

Luminaire Tested: **24GR-LD5-56-A19/156-UNV-L940-CD1-U**

Issue Date: 3/12/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P219239  
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-L940-CD1-U  
Description: METALUX GR 2X4 LED TROFFER WITH A19/156 LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4782.1 lumens  
Efficiency: N/A  
Efficacy: 105.8 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

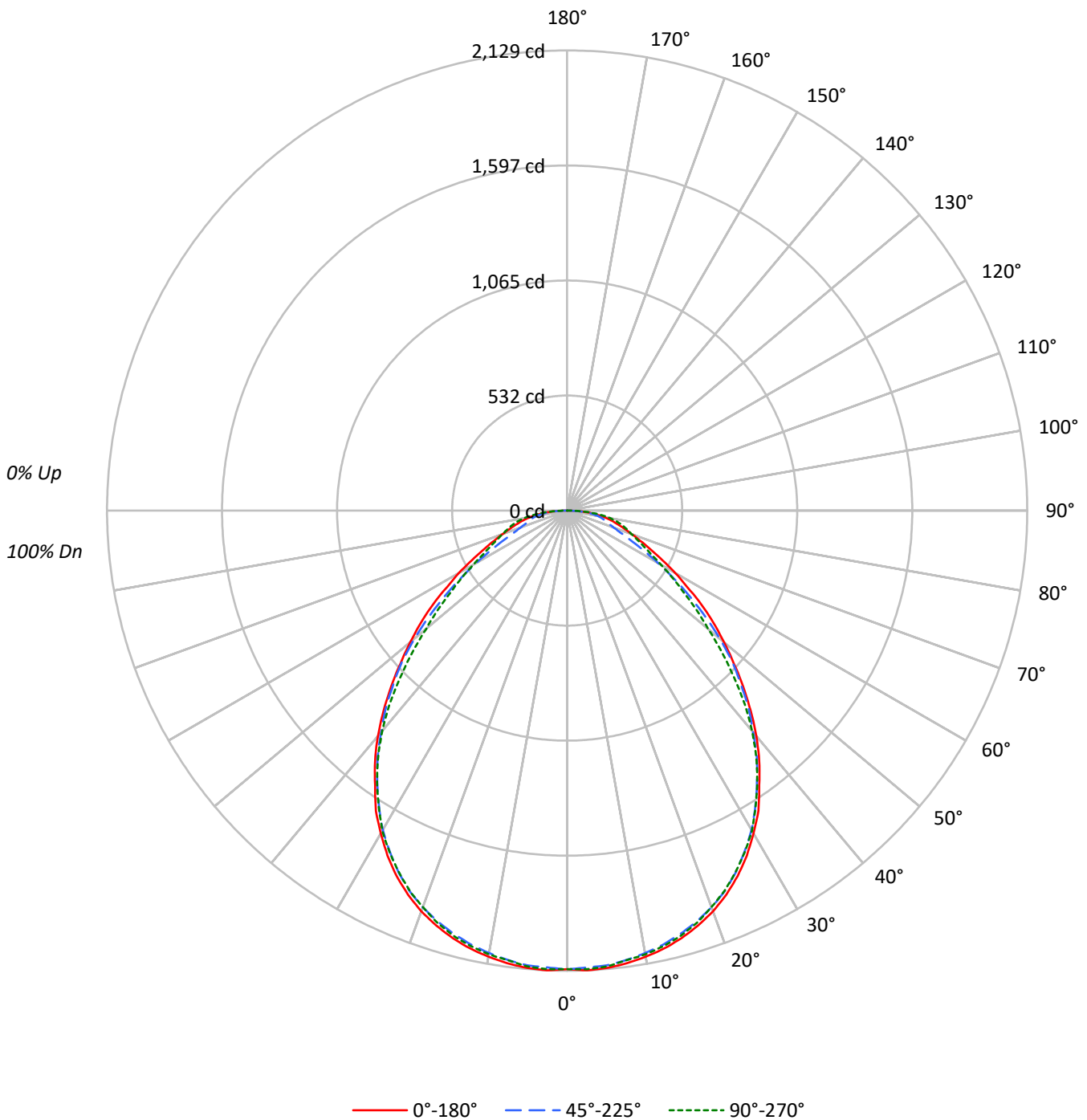
Input Watts (W): 45.182  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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					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°	3250	3250	3250
5°	3265	3247	3255
10°	3260	3233	3242
15°	3247	3214	3228
20°	3216	3184	3182
25°	3154	3120	3117
30°	3050	3018	3025
35°	2897	2864	2868
40°	2724	2677	2660
45°	2496	2463	2365
50°	2257	2195	2030
55°	2026	1845	1750
60°	1774	1484	1539
65°	1548	1167	1416
70°	1416	1019	1416
75°	1416	1084	1561
80°	1537	1277	1779
85°	1689	1441	1908



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	200.9	4.2
10°-20°	573.4	12.0
20°-30°	850.2	17.8
30°-40°	959.2	20.1
40°-50°	868.7	18.2
50°-60°	626.7	13.1
60°-70°	374.2	7.8
70°-80°	231.3	4.8
80°-90°	97.4	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°	1624.5	34.0
0°-40°	2583.7	54.0
0°-60°	4079.1	85.3
0°-90°	4782.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4782.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2122	2122	2122	2122	2122	
5°	2124	2121	2112	2110	2117	202
15°	2048	2035	2027	2028	2036	577
25°	1866	1856	1846	1840	1845	857
35°	1549	1547	1532	1532	1534	969
45°	1152	1145	1137	1109	1092	888
55°	759	735	691	657	655	677
65°	427	376	322	366	391	430
75°	239	208	183	228	264	256
85°	96	84	82	107	109	100
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2121.7	2121.7	2121.7	2121.7	2121.7
2.5°	2129.1	2123.3	2115.9	2120.2	2123.9
5°	2123.9	2121.0	2112.2	2109.9	2117.3
7.5°	2112.8	2105.5	2097.4	2101.1	2098.1
10°	2095.9	2089.2	2078.9	2079.7	2084.8
12.5°	2075.2	2067.1	2056.0	2058.9	2063.4
15°	2047.8	2035.3	2027.2	2027.9	2036.0
17.5°	2013.2	2003.5	1993.2	1995.4	1999.1
20°	1973.3	1968.1	1953.3	1948.8	1952.5
22.5°	1923.0	1913.4	1905.2	1903.1	1903.8
25°	1866.1	1855.8	1846.2	1839.5	1844.7
27.5°	1799.6	1790.8	1778.2	1776.0	1780.5
30°	1724.3	1717.6	1706.6	1703.6	1710.3
32.5°	1647.4	1636.4	1620.8	1620.8	1622.3
35°	1549.2	1547.0	1531.5	1532.2	1533.7
37.5°	1460.5	1450.2	1441.4	1432.5	1436.9
40°	1362.3	1350.5	1338.7	1332.7	1330.5
42.5°	1256.6	1247.8	1242.6	1221.2	1216.0
45°	1152.5	1145.1	1136.9	1108.9	1091.9
47.5°	1046.1	1044.6	1037.9	988.5	971.5
50°	947.1	944.9	921.2	868.8	851.8
52.5°	853.3	838.5	807.5	755.8	752.8
55°	758.7	735.0	690.8	656.8	655.3
57.5°	659.0	630.9	585.8	567.3	577.0
60°	579.2	536.4	484.6	486.8	502.3
62.5°	496.5	448.4	397.5	419.6	438.1
65°	427.0	376.0	322.1	365.7	390.8
67.5°	366.4	319.1	267.5	325.8	350.2
70°	316.2	277.8	227.6	288.9	316.2
72.5°	276.3	240.8	201.7	259.3	291.1
75°	239.3	207.6	183.2	228.2	263.8
77.5°	207.6	176.6	165.5	201.7	236.4
80°	174.3	146.3	144.8	175.8	201.7
82.5°	136.0	116.7	116.7	147.0	162.5
85°	96.1	84.2	82.0	107.2	108.6
87.5°	49.5	47.3	42.8	56.2	56.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)