

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: P219059

Luminaire Tested: **24GR-LD5-56-F1-UNV-L940-CD1-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P219059
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35585)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/12/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-56-F1-UNV-L940-CD1-U
Description: METALUX GR 2X4 LED TROFFER WITH F1 LENS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4913.4 lumens
Efficiency: N/A
Efficacy: 108.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.18 / 1.26
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

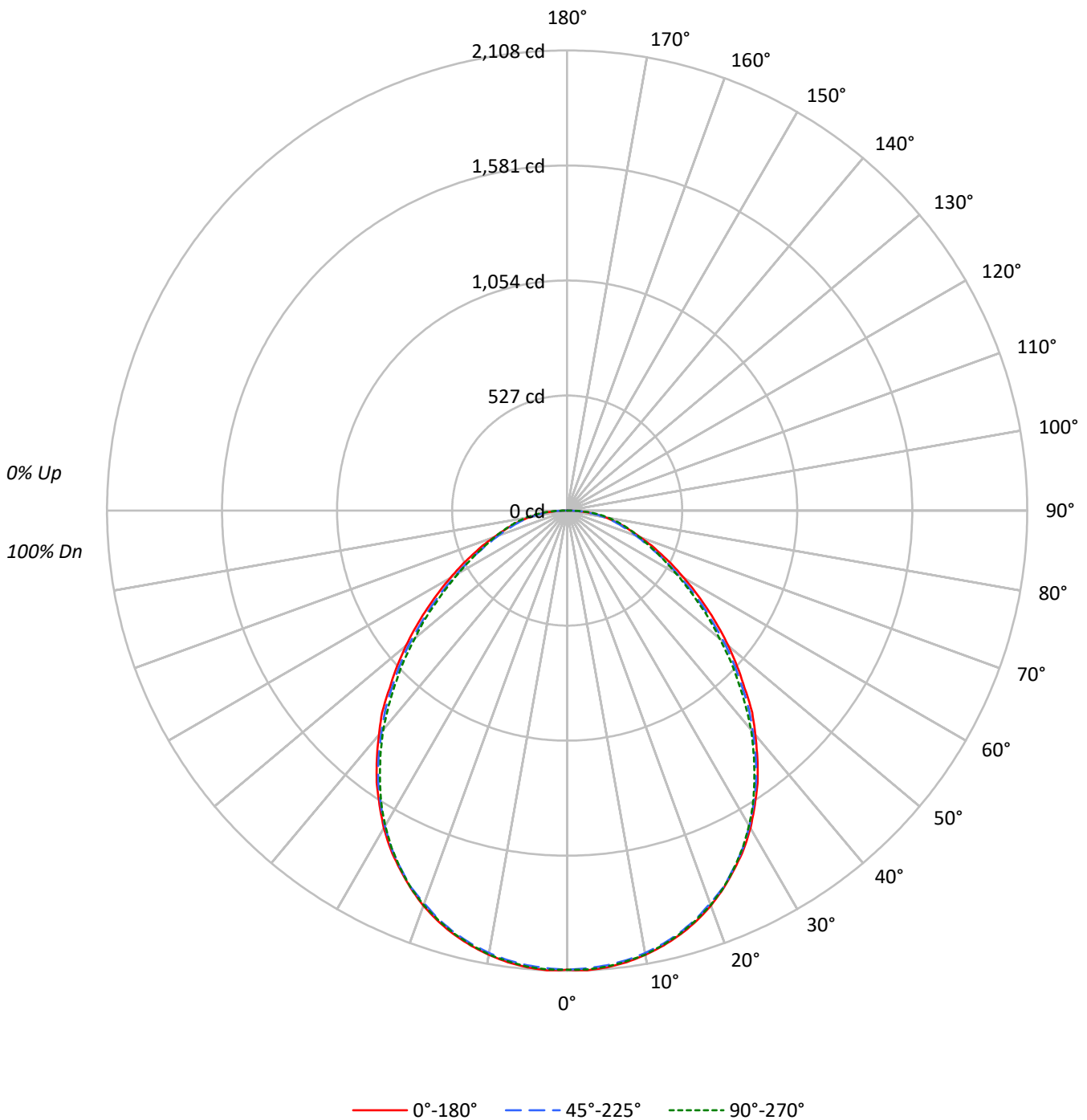
Input Watts (W): 45.182
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	105	101	97	107	103	99	96	98	95	93	94	92	90	91	89	87	85					85			
2	100	92	86	80	98	90	85	80	87	82	78	84	80	76	81	77	74	72					72			
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62					62			
4	85	73	65	58	82	72	64	58	69	63	57	67	61	57	65	60	56	54					54			
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47					47			
6	72	60	51	45	71	59	51	45	57	50	44	55	49	44	54	48	44	42					42			
7	67	54	46	40	66	54	46	40	52	45	40	51	44	39	49	44	39	37					37			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	33					33			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30					30			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3222	3222	3222
5°	3230	3215	3224
10°	3214	3200	3212
15°	3187	3172	3180
20°	3140	3121	3134
25°	3064	3053	3056
30°	2970	2953	2947
35°	2844	2821	2796
40°	2681	2646	2620
45°	2491	2447	2401
50°	2296	2236	2170
55°	2087	2015	1952
60°	1891	1791	1759
65°	1729	1614	1625
70°	1591	1499	1570
75°	1547	1466	1601
80°	1551	1510	1704
85°	1703	1611	1877



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	198.7	4.0
10°-20°	564.1	11.5
20°-30°	831.2	16.9
30°-40°	940.0	19.1
40°-50°	871.9	17.7
50°-60°	677.4	13.8
60°-70°	454.2	9.2
70°-80°	272.2	5.5
80°-90°	103.6	2.1
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°	1594.0	32.4
0°-40°	2534.0	51.6
0°-60°	4083.3	83.1
0°-90°	4913.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4913.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2104	2104	2104	2104	2104	
5°	2101	2095	2091	2089	2097	199
15°	2010	2001	2001	1997	2005	566
25°	1813	1811	1807	1804	1808	834
35°	1521	1515	1509	1500	1495	948
45°	1150	1145	1130	1112	1108	889
55°	782	773	754	736	731	702
65°	477	462	445	444	448	476
75°	261	252	248	260	270	276
85°	97	91	92	108	107	102
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2103.6	2103.6	2103.6	2103.6	2103.6
2.5°	2108.2	2101.4	2098.4	2096.9	2103.6
5°	2100.6	2094.6	2090.8	2089.3	2096.9
7.5°	2087.0	2080.2	2077.9	2074.9	2082.5
10°	2066.6	2060.5	2057.5	2055.2	2065.0
12.5°	2040.8	2035.5	2032.4	2031.0	2037.0
15°	2009.7	2001.4	2000.6	1996.8	2005.2
17.5°	1971.1	1963.6	1962.0	1960.5	1965.8
20°	1926.4	1918.8	1915.0	1914.3	1922.6
22.5°	1872.6	1867.3	1868.9	1864.3	1870.3
25°	1812.8	1810.6	1806.7	1803.7	1808.2
27.5°	1750.7	1743.1	1743.1	1737.0	1741.6
30°	1679.5	1674.2	1669.6	1663.6	1666.6
32.5°	1599.2	1596.9	1590.1	1584.0	1585.5
35°	1521.2	1515.1	1509.0	1499.9	1495.4
37.5°	1431.7	1425.7	1418.1	1405.2	1403.7
40°	1340.8	1335.6	1323.5	1309.8	1310.6
42.5°	1254.5	1246.1	1231.0	1212.9	1209.1
45°	1149.9	1145.4	1129.5	1112.1	1108.3
47.5°	1056.8	1053.8	1034.1	1015.8	1011.3
50°	963.6	955.3	938.6	920.4	910.6
52.5°	872.0	861.3	840.1	828.0	823.4
55°	781.7	772.7	754.5	735.6	731.0
57.5°	697.7	687.8	665.9	652.2	650.0
60°	617.4	608.3	584.8	575.0	574.2
62.5°	546.2	531.0	515.1	508.3	509.0
65°	477.2	462.1	445.4	443.9	448.5
67.5°	416.7	400.8	384.1	390.1	394.7
70°	355.3	343.9	334.8	344.7	350.7
72.5°	303.0	296.2	287.8	301.5	309.1
75°	261.4	252.2	247.7	259.8	270.5
77.5°	216.6	209.1	209.1	222.0	233.3
80°	175.8	170.5	171.2	186.4	193.2
82.5°	137.9	130.3	131.1	150.0	154.5
85°	96.9	90.9	91.7	107.6	106.8
87.5°	50.7	48.5	50.7	62.1	59.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)