

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: P219029

Luminaire Tested: **24GR-LD5-56-F1-UNV-L930-CD1-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P219029
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-L930-CD1-U
Description: METALUX GR 2X4 LED TROFFER WITH F1 LENS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4528.7 lumens
Efficiency: N/A
Efficacy: 100.2 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

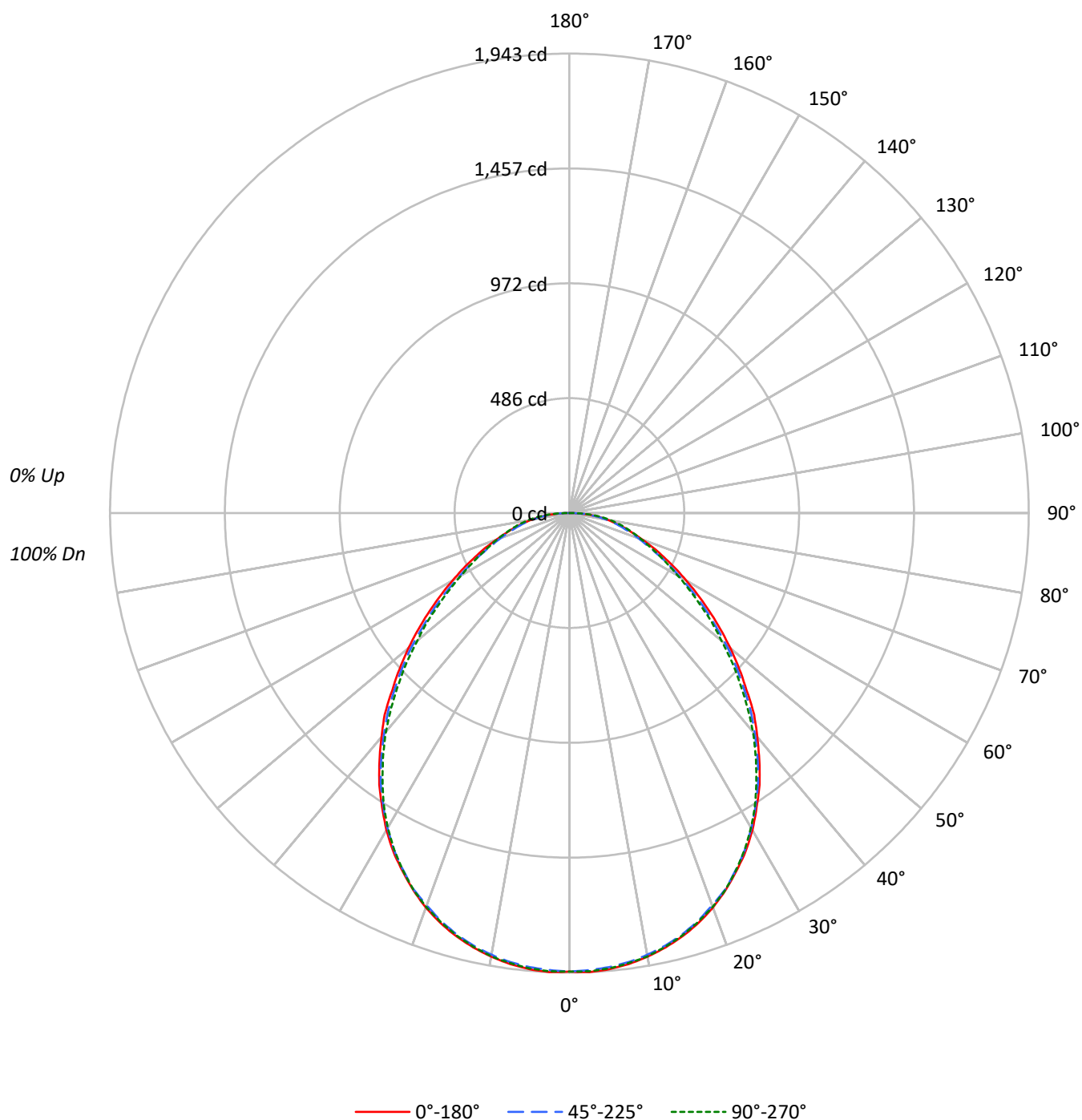
Input Watts (W): 45.182
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	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
1	109	105	101	97	107	103	99	96		98	95	93		94	92	90		91	89	87
2	100	92	86	80	98	90	85	80		87	82	78		84	80	76		81	77	74
3	92	82	74	68	89	80	73	67		77	71	66		75	69	65		72	68	64
4	85	73	65	58	82	72	64	58		69	63	57		67	61	57		65	60	56
5	78	66	57	51	76	65	57	51		63	56	50		61	55	50		59	54	49
6	72	60	51	45	71	59	51	45		57	50	44		55	49	44		54	48	44
7	67	54	46	40	66	54	46	40		52	45	40		51	44	39		49	44	39
8	63	50	42	36	61	49	41	36		48	41	36		47	40	36		46	40	35
9	59	46	38	33	58	45	38	33		44	37	32		43	37	32		42	36	32
10	55	43	35	30	54	42	35	30		41	34	30		40	34	29		39	33	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2970	2970	2970
5°	2977	2963	2971
10°	2962	2949	2960
15°	2937	2924	2931
20°	2894	2877	2888
25°	2824	2814	2816
30°	2738	2722	2717
35°	2621	2601	2577
40°	2471	2439	2415
45°	2296	2255	2213
50°	2116	2061	2000
55°	1924	1857	1799
60°	1743	1651	1621
65°	1594	1488	1498
70°	1467	1382	1447
75°	1426	1351	1475
80°	1429	1392	1570
85°	1571	1485	1731



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.2	4.0
10°-20°	519.9	11.5
20°-30°	766.1	16.9
30°-40°	866.4	19.1
40°-50°	803.6	17.7
50°-60°	624.4	13.8
60°-70°	418.7	9.2
70°-80°	250.9	5.5
80°-90°	95.5	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°	1469.2	32.4
0°-40°	2335.6	51.6
0°-60°	3763.6	83.1
0°-90°	4528.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4528.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1939	1939	1939	1939	1939	
5°	1936	1931	1927	1926	1933	184
15°	1852	1845	1844	1840	1848	522
25°	1671	1669	1665	1662	1667	769
35°	1402	1396	1391	1382	1378	874
45°	1060	1056	1041	1025	1022	820
55°	720	712	695	678	674	647
65°	440	426	411	409	413	439
75°	241	232	228	240	249	254
85°	89	84	84	99	98	94
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1939.0	1939.0	1939.0	1939.0	1939.0
2.5°	1943.2	1936.9	1934.1	1932.7	1939.0
5°	1936.2	1930.6	1927.1	1925.7	1932.7
7.5°	1923.6	1917.3	1915.3	1912.4	1919.5
10°	1904.8	1899.2	1896.4	1894.3	1903.4
12.5°	1881.0	1876.2	1873.4	1872.0	1877.6
15°	1852.4	1844.8	1844.0	1840.5	1848.2
17.5°	1816.8	1809.8	1808.4	1807.0	1811.9
20°	1775.6	1768.6	1765.1	1764.4	1772.1
22.5°	1726.0	1721.1	1722.5	1718.3	1723.9
25°	1670.8	1668.8	1665.3	1662.5	1666.6
27.5°	1613.6	1606.6	1606.6	1601.0	1605.2
30°	1548.0	1543.1	1538.9	1533.3	1536.1
32.5°	1473.9	1471.9	1465.6	1460.0	1461.4
35°	1402.0	1396.5	1390.9	1382.5	1378.3
37.5°	1319.6	1314.0	1307.1	1295.2	1293.8
40°	1235.8	1231.0	1219.8	1207.2	1207.9
42.5°	1156.3	1148.6	1134.6	1117.8	1114.4
45°	1059.9	1055.8	1041.1	1025.0	1021.5
47.5°	974.0	971.2	953.1	936.4	932.1
50°	888.1	880.4	865.1	848.4	839.3
52.5°	803.7	793.9	774.3	763.2	759.0
55°	720.5	712.2	695.4	678.0	673.8
57.5°	643.0	634.0	613.8	601.1	599.1
60°	569.1	560.7	539.1	530.0	529.2
62.5°	503.4	489.5	474.8	468.5	469.2
65°	439.8	425.9	410.6	409.2	413.4
67.5°	384.0	369.3	354.0	359.6	363.8
70°	327.5	317.0	308.6	317.7	323.2
72.5°	279.3	273.0	265.4	277.9	284.9
75°	240.9	232.5	228.3	239.5	249.3
77.5°	199.7	192.7	192.7	204.6	215.1
80°	162.0	157.1	157.8	171.8	178.0
82.5°	127.1	120.1	120.8	138.3	142.4
85°	89.4	83.8	84.5	99.1	98.5
87.5°	46.8	44.7	46.8	57.2	54.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)