

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: P275925

Luminaire Tested: **24CZ2-60HE-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P275925
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-60HE-UNV-L83050-W2A1-U-4500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6049.0 lumens
Efficiency: N/A
Efficacy: 130.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

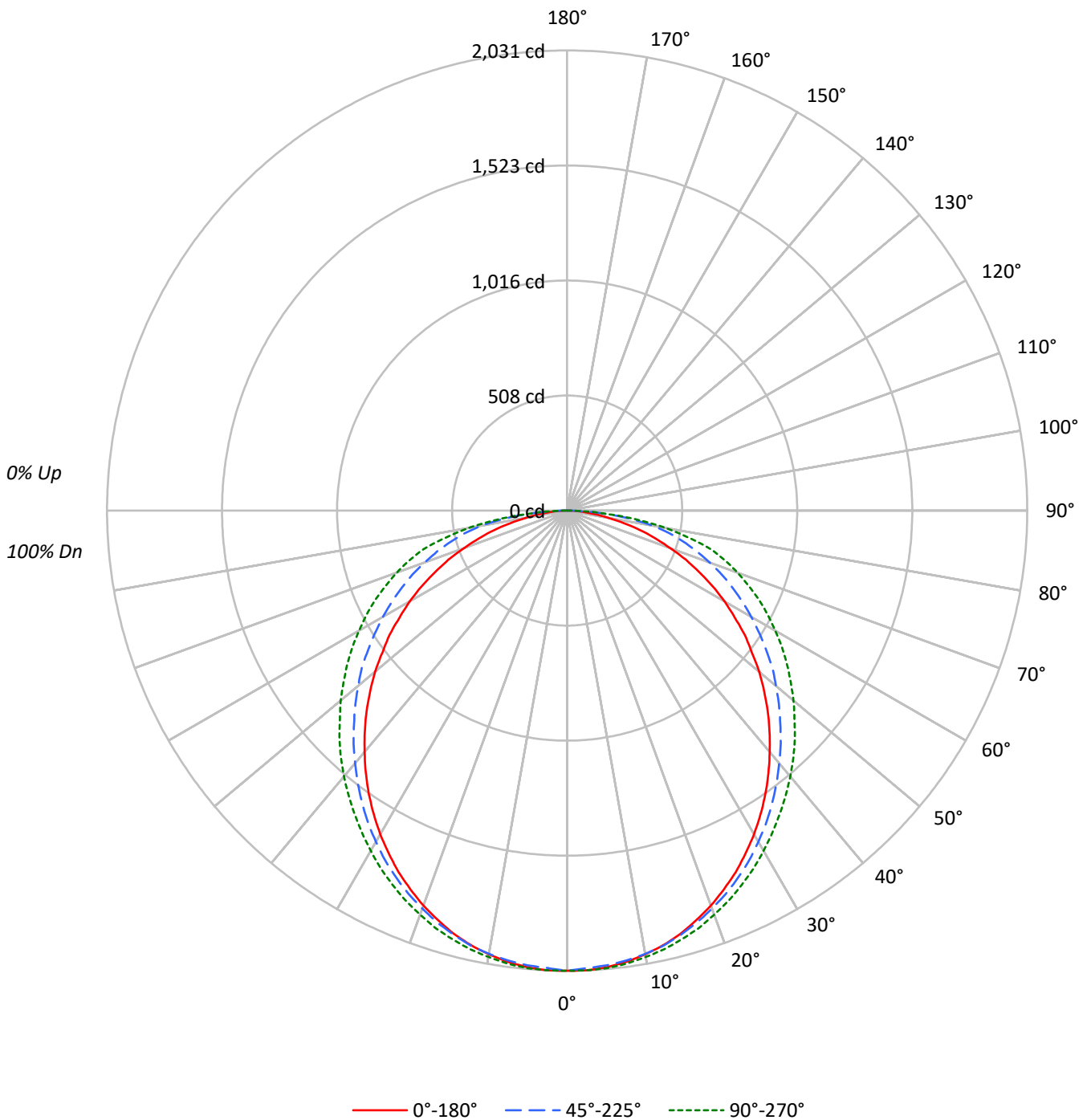
Input Watts (W): 46.407
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2733	2733	2733
5°	2732	2721	2738
10°	2717	2714	2733
15°	2694	2700	2728
20°	2656	2677	2717
25°	2613	2653	2706
30°	2563	2622	2694
35°	2507	2590	2686
40°	2443	2557	2691
45°	2382	2531	2704
50°	2316	2519	2730
55°	2245	2515	2780
60°	2157	2526	2852
65°	2044	2564	2976
70°	1898	2629	3145
75°	1732	2760	3411
80°	1423	2972	3410
85°	1091	2743	2930



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	192.1	3.2
10°-20°	548.4	9.1
20°-30°	825.2	13.6
30°-40°	988.9	16.3
40°-50°	1030.5	17.0
50°-60°	958.8	15.9
60°-70°	789.7	13.1
70°-80°	537.8	8.9
80°-90°	177.6	2.9
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°	1565.6	25.9
0°-40°	2554.6	42.2
0°-60°	4543.9	75.1
0°-90°	6049.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6049.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2031	2031	2031	2031	2031	
5°	2023	2023	2015	2025	2027	192
15°	1934	1936	1938	1956	1958	545
25°	1760	1768	1787	1817	1823	810
35°	1526	1544	1577	1619	1635	954
45°	1252	1278	1330	1397	1421	965
55°	957	989	1072	1157	1185	853
65°	642	696	806	900	935	637
75°	333	408	531	626	656	351
85°	71	137	178	190	190	88
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2030.9	2030.9	2030.9	2030.9	2030.9
2.5°	2030.9	2030.9	2020.8	2030.9	2030.9
5°	2022.9	2022.9	2014.8	2024.9	2026.9
7.5°	2008.7	2010.7	2002.7	2014.8	2016.8
10°	1988.5	1990.6	1986.5	1998.6	2000.6
12.5°	1964.3	1966.3	1966.3	1980.5	1982.5
15°	1934.0	1936.0	1938.1	1956.2	1958.3
17.5°	1895.7	1901.7	1905.8	1928.0	1932.0
20°	1855.3	1861.3	1869.4	1893.7	1897.7
22.5°	1808.9	1816.9	1831.1	1857.3	1863.4
25°	1760.4	1768.5	1786.7	1816.9	1823.0
27.5°	1705.9	1718.0	1740.2	1772.5	1780.6
30°	1649.4	1661.5	1687.7	1722.1	1734.2
32.5°	1588.8	1605.0	1635.2	1673.6	1685.7
35°	1526.2	1544.4	1576.7	1619.1	1635.2
37.5°	1459.6	1479.8	1518.2	1564.6	1584.8
40°	1391.0	1415.2	1455.6	1510.1	1532.3
42.5°	1322.3	1344.5	1395.0	1453.5	1477.8
45°	1251.7	1277.9	1330.4	1397.0	1421.2
47.5°	1179.0	1205.2	1267.8	1338.5	1360.7
50°	1106.3	1132.6	1203.2	1277.9	1304.2
52.5°	1027.6	1061.9	1142.7	1217.3	1243.6
55°	956.9	989.2	1072.0	1156.8	1185.0
57.5°	876.2	914.5	1005.4	1094.2	1124.5
60°	801.5	841.8	938.8	1029.6	1059.9
62.5°	724.8	769.2	872.1	965.0	999.3
65°	642.0	696.5	805.5	900.4	934.7
67.5°	567.3	623.8	738.9	835.8	866.1
70°	482.5	551.1	668.2	765.1	799.5
72.5°	409.8	478.5	601.6	696.5	730.8
75°	333.1	407.8	530.9	625.8	656.1
77.5°	256.4	339.2	462.3	535.0	545.1
80°	183.7	270.5	383.6	426.0	440.1
82.5°	129.2	207.9	282.6	310.9	319.0
85°	70.7	137.3	177.7	189.8	189.8
87.5°	30.3	58.5	70.7	72.7	74.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)