

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: P275999

Luminaire Tested: **24CZ2-60HE-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P275999
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-L93050-W2A1-U-4000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5238.4 lumens
Efficiency: N/A
Efficacy: 115.3 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

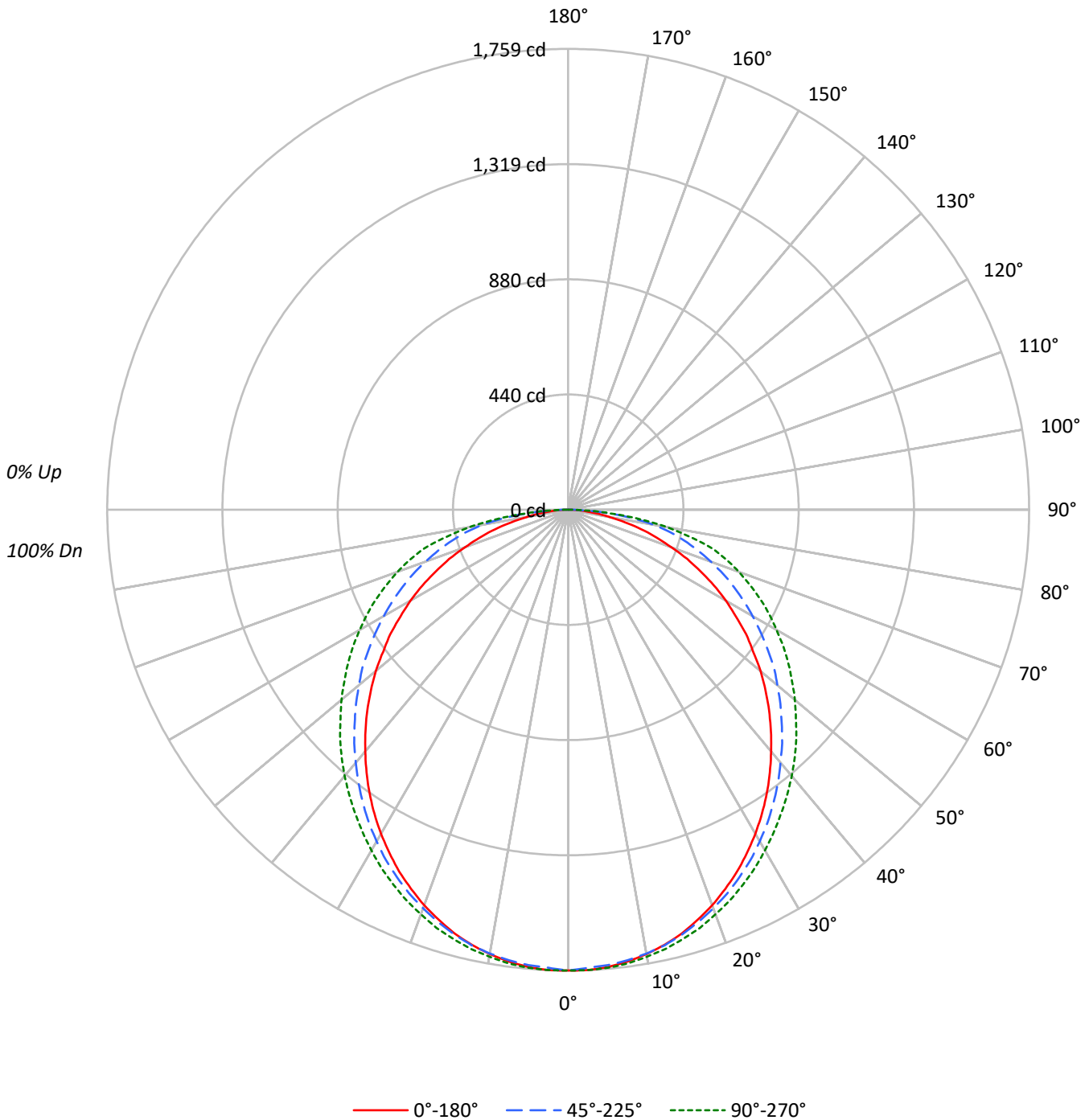
Input Watts (W): 45.418968
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2366	2366	2366
5°	2366	2357	2371
10°	2353	2350	2367
15°	2333	2338	2362
20°	2301	2318	2353
25°	2263	2297	2344
30°	2219	2271	2333
35°	2171	2243	2326
40°	2116	2214	2331
45°	2062	2192	2342
50°	2006	2181	2364
55°	1944	2178	2407
60°	1868	2187	2470
65°	1770	2221	2577
70°	1644	2277	2723
75°	1500	2390	2954
80°	1233	2574	2953
85°	945	2374	2536



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.3	3.2
10°-20°	474.9	9.1
20°-30°	714.6	13.6
30°-40°	856.4	16.3
40°-50°	892.4	17.0
50°-60°	830.3	15.9
60°-70°	683.9	13.1
70°-80°	465.8	8.9
80°-90°	153.8	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°	1355.8	25.9
0°-40°	2212.2	42.2
0°-60°	3935.0	75.1
0°-90°	5238.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5238.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1759	1759	1759	1759	1759	
5°	1752	1752	1745	1754	1755	166
15°	1675	1677	1678	1694	1696	472
25°	1524	1532	1547	1573	1579	702
35°	1322	1337	1365	1402	1416	826
45°	1084	1107	1152	1210	1231	836
55°	829	857	928	1002	1026	739
65°	556	603	698	780	809	552
75°	288	353	460	542	568	304
85°	61	119	154	164	164	76
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1758.8	1758.8	1758.8	1758.8	1758.8
2.5°	1758.8	1758.8	1750.0	1758.8	1758.8
5°	1751.8	1751.8	1744.8	1753.5	1755.3
7.5°	1739.5	1741.3	1734.3	1744.8	1746.5
10°	1722.0	1723.8	1720.3	1730.8	1732.5
12.5°	1701.1	1702.8	1702.8	1715.1	1716.8
15°	1674.8	1676.6	1678.3	1694.1	1695.8
17.5°	1641.6	1646.9	1650.4	1669.6	1673.1
20°	1606.7	1611.9	1618.9	1639.9	1643.4
22.5°	1566.5	1573.4	1585.7	1608.4	1613.7
25°	1524.5	1531.5	1547.2	1573.4	1578.7
27.5°	1477.3	1487.8	1507.0	1535.0	1542.0
30°	1428.3	1438.8	1461.6	1491.3	1501.8
32.5°	1375.9	1389.9	1416.1	1449.3	1459.8
35°	1321.7	1337.4	1365.4	1402.1	1416.1
37.5°	1264.0	1281.5	1314.7	1354.9	1372.4
40°	1204.6	1225.5	1260.5	1307.7	1326.9
42.5°	1145.1	1164.3	1208.1	1258.8	1279.7
45°	1083.9	1106.7	1152.1	1209.8	1230.8
47.5°	1021.0	1043.7	1097.9	1159.1	1178.3
50°	958.1	980.8	1042.0	1106.7	1129.4
52.5°	889.9	919.6	989.5	1054.2	1076.9
55°	828.7	856.7	928.3	1001.8	1026.2
57.5°	758.7	792.0	870.6	947.6	973.8
60°	694.1	729.0	812.9	891.6	917.8
62.5°	627.6	666.1	755.3	835.7	865.4
65°	556.0	603.2	697.6	779.7	809.4
67.5°	491.3	540.2	639.9	723.8	750.0
70°	417.8	477.3	578.7	662.6	692.3
72.5°	354.9	414.3	521.0	603.2	632.9
75°	288.5	353.2	459.8	542.0	568.2
77.5°	222.0	293.7	400.4	463.3	472.0
80°	159.1	234.3	332.2	368.9	381.1
82.5°	111.9	180.1	244.8	269.2	276.2
85°	61.2	118.9	153.8	164.3	164.3
87.5°	26.2	50.7	61.2	62.9	64.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)