

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: P276379

Luminaire Tested: **24CZ2-45-S-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276379
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-45-S-UNV-L83050-W2A1-U-4000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4730.0 lumens
Efficiency: N/A
Efficacy: 132.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

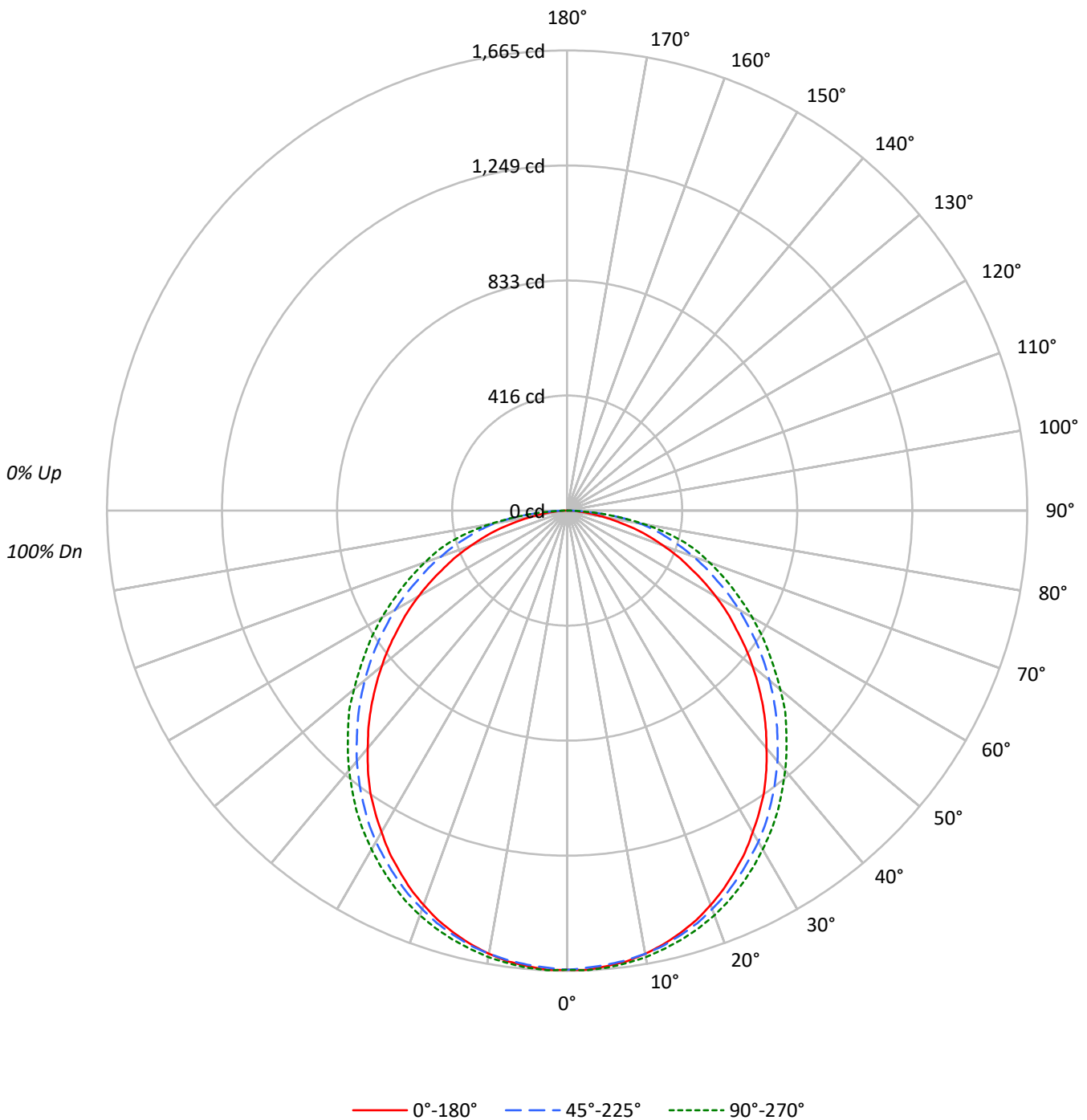
Input Watts (W): 35.772264
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2236	2236	2236
5°	2234	2228	2242
10°	2225	2225	2241
15°	2204	2214	2237
20°	2175	2196	2231
25°	2135	2175	2217
30°	2087	2150	2199
35°	2041	2115	2181
40°	1971	2079	2156
45°	1907	2038	2133
50°	1833	2000	2107
55°	1752	1963	2086
60°	1670	1933	2082
65°	1564	1899	2095
70°	1448	1909	2151
75°	1297	1945	2273
80°	1048	2060	2224
85°	789	1809	1763



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.3	3.3
10°-20°	449.5	9.5
20°-30°	675.7	14.3
30°-40°	804.9	17.0
40°-50°	823.7	17.4
50°-60°	741.6	15.7
60°-70°	582.4	12.3
70°-80°	378.0	8.0
80°-90°	116.9	2.5
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°	1282.5	27.1
0°-40°	2087.4	44.1
0°-60°	3652.7	77.2
0°-90°	4730.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4730.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1662	1662	1662	1662	1662	
5°	1654	1657	1650	1659	1660	157
15°	1582	1587	1590	1603	1606	446
25°	1438	1450	1465	1489	1493	662
35°	1242	1258	1288	1319	1328	775
45°	1002	1026	1071	1112	1121	773
55°	747	780	837	880	889	669
65°	491	529	596	646	658	489
75°	249	298	374	425	437	264
85°	51	95	117	114	114	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1661.7	1661.7	1661.7	1661.7	1661.7
2.5°	1663.2	1663.2	1655.7	1663.2	1664.7
5°	1654.2	1657.2	1649.7	1658.7	1660.2
7.5°	1645.2	1645.2	1640.6	1649.7	1651.2
10°	1628.6	1630.1	1628.6	1639.1	1640.6
12.5°	1607.6	1610.6	1612.1	1622.6	1624.1
15°	1582.1	1586.6	1589.6	1603.1	1606.1
17.5°	1553.5	1558.0	1565.5	1580.5	1583.6
20°	1518.9	1525.0	1534.0	1553.5	1558.0
22.5°	1481.4	1487.4	1502.4	1520.5	1528.0
25°	1437.8	1449.8	1464.9	1488.9	1493.4
27.5°	1394.2	1404.8	1424.3	1449.8	1455.8
30°	1343.2	1359.7	1383.7	1409.3	1415.3
32.5°	1293.6	1310.1	1338.7	1365.7	1373.2
35°	1242.5	1257.5	1287.6	1319.1	1328.1
37.5°	1183.9	1203.4	1236.5	1268.0	1277.1
40°	1122.3	1146.3	1183.9	1217.0	1227.5
42.5°	1063.7	1089.3	1126.8	1162.9	1174.9
45°	1002.1	1026.2	1071.2	1111.8	1120.8
47.5°	939.0	966.1	1014.1	1054.7	1069.7
50°	875.9	904.5	955.5	997.6	1006.6
52.5°	812.8	842.9	896.9	942.0	946.5
55°	746.7	779.8	836.8	880.4	889.4
57.5°	686.6	715.2	776.8	821.8	832.3
60°	620.5	652.1	718.2	760.2	773.7
62.5°	557.4	590.5	659.6	701.6	713.7
65°	491.3	528.9	596.5	646.0	658.1
67.5°	434.2	470.3	542.4	590.5	602.5
70°	368.1	408.7	485.3	534.9	546.9
72.5°	311.0	353.1	429.7	477.8	495.8
75°	249.4	297.5	374.1	425.2	437.2
77.5°	189.3	244.9	323.0	362.1	362.1
80°	135.2	193.8	265.9	284.0	287.0
82.5°	88.6	145.7	196.8	195.3	195.3
85°	51.1	94.7	117.2	114.2	114.2
87.5°	19.5	39.1	42.1	42.1	40.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)