

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: P275908

Luminaire Tested: **24CZ2-45HE-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P275908
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: 24CZ2-45HE-UNV-L83050-W2A1-U-3500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4243.0 lumens
Efficiency: N/A
Efficacy: 135.0 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

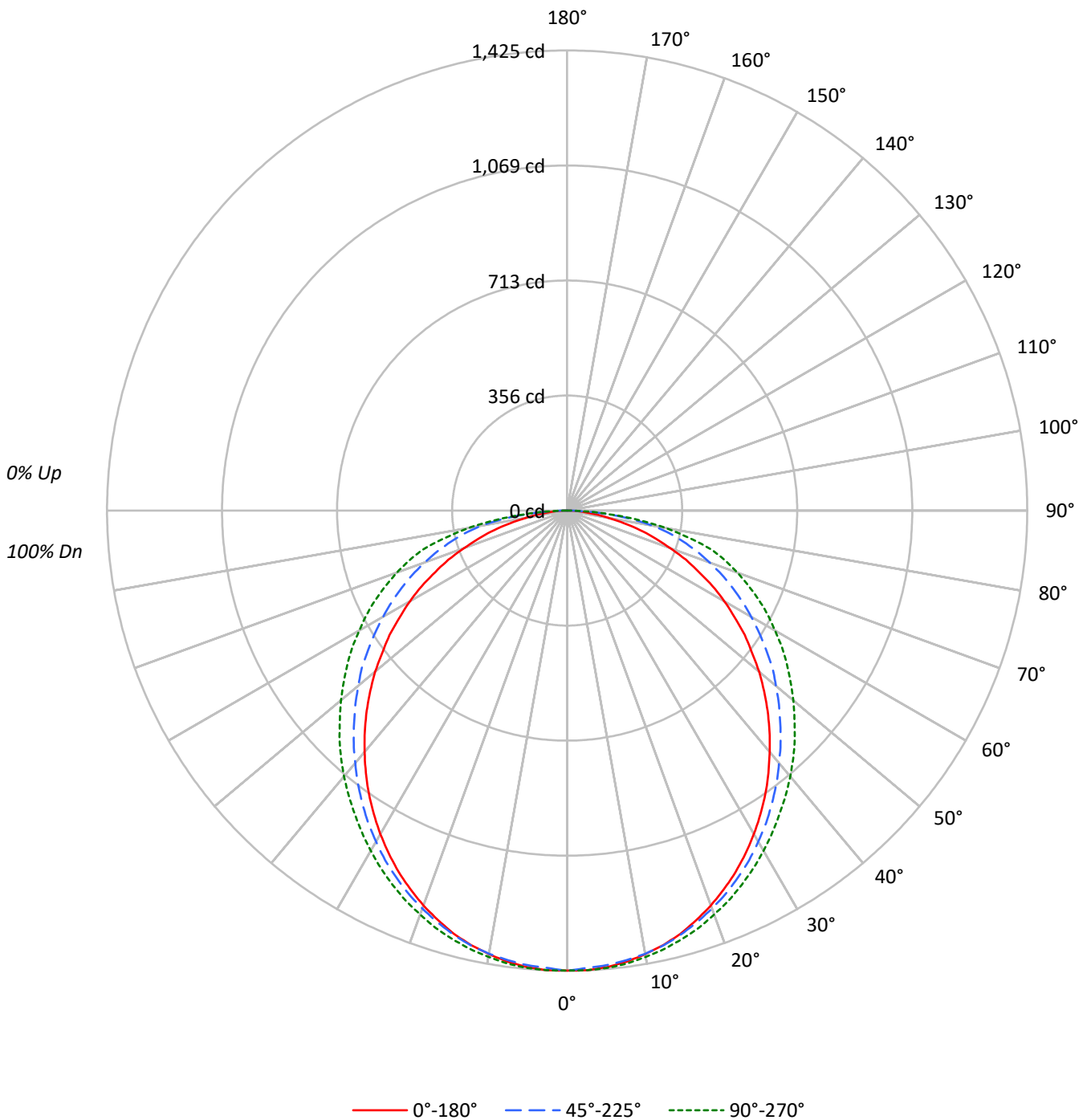
Input Watts (W): 31.434
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1917	1917	1917
5°	1916	1909	1920
10°	1906	1904	1917
15°	1890	1894	1913
20°	1863	1878	1906
25°	1833	1860	1898
30°	1797	1839	1890
35°	1759	1817	1884
40°	1714	1793	1888
45°	1671	1776	1897
50°	1624	1767	1915
55°	1574	1764	1950
60°	1513	1772	2000
65°	1434	1799	2087
70°	1331	1844	2206
75°	1215	1936	2392
80°	999	2085	2392
85°	766	1924	2055



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.7	3.2
10°-20°	384.6	9.1
20°-30°	578.8	13.6
30°-40°	693.7	16.3
40°-50°	722.9	17.0
50°-60°	672.5	15.9
60°-70°	553.9	13.1
70°-80°	377.2	8.9
80°-90°	124.6	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°	1098.2	25.9
0°-40°	1791.9	42.2
0°-60°	3187.3	75.1
0°-90°	4243.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4243.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1425	1425	1425	1425	1425	
5°	1419	1419	1413	1420	1422	135
15°	1357	1358	1359	1372	1374	382
25°	1235	1240	1253	1274	1279	568
35°	1071	1083	1106	1136	1147	669
45°	878	896	933	980	997	677
55°	671	694	752	811	831	598
65°	450	488	565	632	656	447
75°	234	286	372	439	460	246
85°	50	96	125	133	133	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1424.6	1424.6	1424.6	1424.6	1424.6
2.5°	1424.6	1424.6	1417.5	1424.6	1424.6
5°	1418.9	1418.9	1413.2	1420.3	1421.7
7.5°	1409.0	1410.4	1404.7	1413.2	1414.7
10°	1394.8	1396.3	1393.4	1401.9	1403.3
12.5°	1377.8	1379.3	1379.3	1389.2	1390.6
15°	1356.6	1358.0	1359.4	1372.2	1373.6
17.5°	1329.7	1333.9	1336.8	1352.4	1355.2
20°	1301.4	1305.6	1311.3	1328.3	1331.1
22.5°	1268.8	1274.5	1284.4	1302.8	1307.0
25°	1234.8	1240.5	1253.2	1274.5	1278.7
27.5°	1196.6	1205.1	1220.7	1243.3	1249.0
30°	1156.9	1165.4	1183.8	1207.9	1216.4
32.5°	1114.5	1125.8	1147.0	1173.9	1182.4
35°	1070.6	1083.3	1106.0	1135.7	1147.0
37.5°	1023.8	1038.0	1064.9	1097.5	1111.6
40°	975.7	992.7	1021.0	1059.2	1074.8
42.5°	927.5	943.1	978.5	1019.6	1036.6
45°	878.0	896.4	933.2	979.9	996.9
47.5°	827.0	845.4	889.3	938.9	954.4
50°	776.0	794.4	844.0	896.4	914.8
52.5°	720.8	744.9	801.5	853.9	872.3
55°	671.2	693.9	751.9	811.4	831.2
57.5°	614.6	641.5	705.2	767.5	788.8
60°	562.2	590.5	658.5	722.2	743.4
62.5°	508.4	539.5	611.7	676.9	701.0
65°	450.3	488.5	565.0	631.6	655.6
67.5°	397.9	437.6	518.3	586.3	607.5
70°	338.4	386.6	468.7	536.7	560.8
72.5°	287.5	335.6	422.0	488.5	512.6
75°	233.7	286.0	372.4	439.0	460.2
77.5°	179.8	237.9	324.3	375.3	382.3
80°	128.9	189.8	269.1	298.8	308.7
82.5°	90.6	145.9	198.3	218.1	223.7
85°	49.6	96.3	124.6	133.1	133.1
87.5°	21.2	41.1	49.6	51.0	52.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)