

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: P276071

Luminaire Tested: **24CZ2-45HE-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276071
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-L82765-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: 4143.5 lumens
Efficiency: N/A
Efficacy: 131.0 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

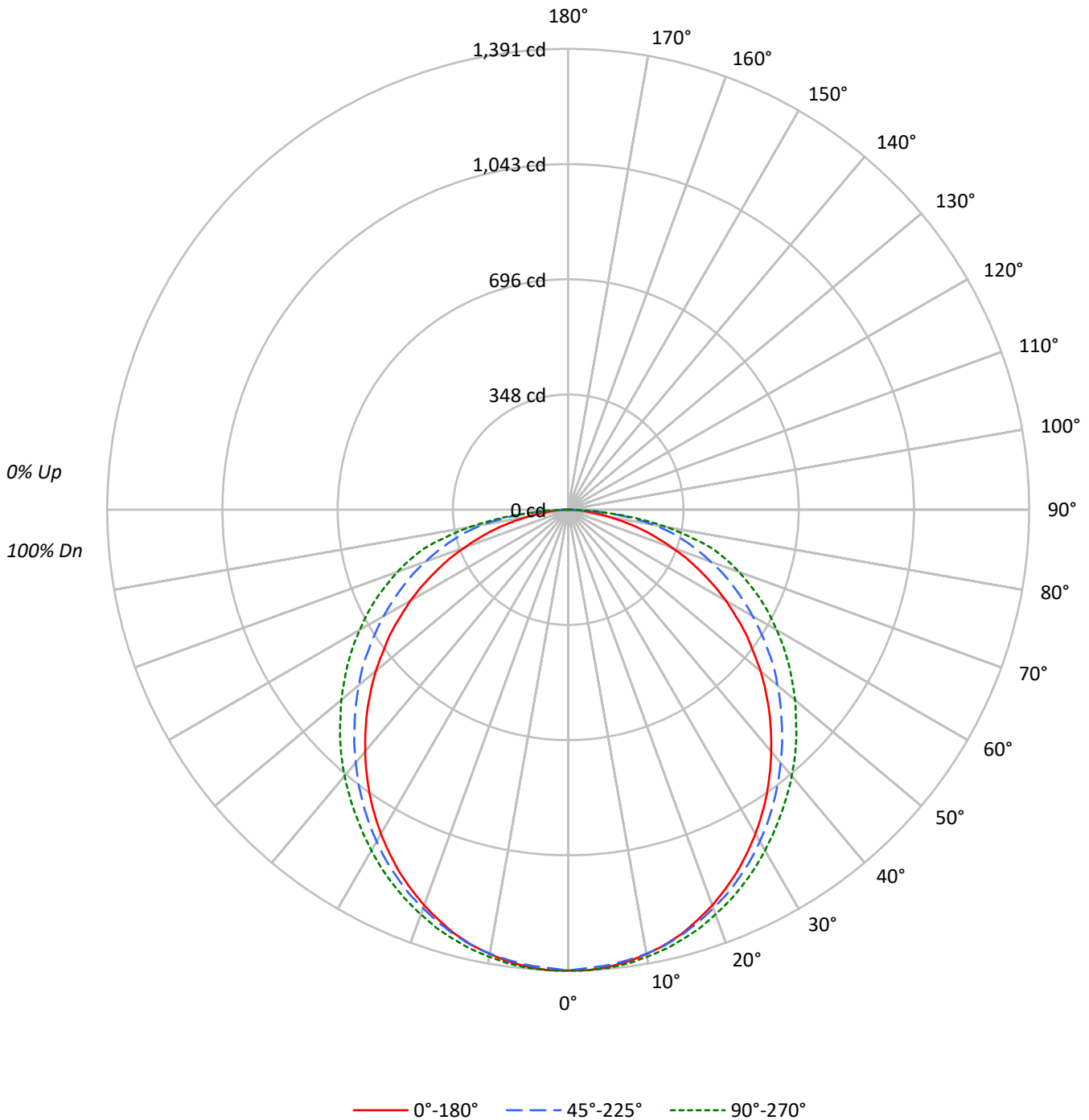
Input Watts (W): 31.62
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1872	1872	1872
5°	1871	1864	1875
10°	1861	1859	1872
15°	1845	1849	1869
20°	1820	1833	1861
25°	1790	1817	1854
30°	1755	1796	1846
35°	1717	1774	1840
40°	1674	1751	1844
45°	1631	1734	1852
50°	1586	1725	1870
55°	1538	1723	1904
60°	1477	1730	1954
65°	1400	1757	2039
70°	1300	1801	2154
75°	1186	1891	2336
80°	975	2035	2336
85°	747	1879	2007



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.6	3.2
10°-20°	375.6	9.1
20°-30°	565.3	13.6
30°-40°	677.4	16.3
40°-50°	705.9	17.0
50°-60°	656.8	15.9
60°-70°	540.9	13.1
70°-80°	368.4	8.9
80°-90°	121.6	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°	1072.4	25.9
0°-40°	1749.8	42.2
0°-60°	3112.5	75.1
0°-90°	4143.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4143.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1391	1391	1391	1391	1391	
5°	1386	1386	1380	1387	1388	132
15°	1325	1326	1328	1340	1341	373
25°	1206	1211	1224	1245	1249	555
35°	1045	1058	1080	1109	1120	653
45°	857	875	911	957	974	661
55°	656	678	734	792	812	584
65°	440	477	552	617	640	437
75°	228	279	364	429	449	241
85°	48	94	122	130	130	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1391.2	1391.2	1391.2	1391.2	1391.2
2.5°	1391.2	1391.2	1384.2	1391.2	1391.2
5°	1385.6	1385.6	1380.1	1387.0	1388.4
7.5°	1375.9	1377.3	1371.8	1380.1	1381.5
10°	1362.1	1363.5	1360.7	1369.0	1370.4
12.5°	1345.5	1346.9	1346.9	1356.6	1358.0
15°	1324.8	1326.2	1327.5	1340.0	1341.4
17.5°	1298.5	1302.7	1305.4	1320.6	1323.4
20°	1270.8	1275.0	1280.5	1297.1	1299.9
22.5°	1239.0	1244.6	1254.3	1272.2	1276.4
25°	1205.9	1211.4	1223.8	1244.6	1248.7
27.5°	1168.5	1176.8	1192.0	1214.2	1219.7
30°	1129.8	1138.1	1156.1	1179.6	1187.9
32.5°	1088.3	1099.4	1120.1	1146.4	1154.7
35°	1045.4	1057.9	1080.0	1109.1	1120.1
37.5°	999.8	1013.6	1039.9	1071.7	1085.5
40°	952.8	969.4	997.0	1034.4	1049.6
42.5°	905.8	921.0	955.6	995.7	1012.3
45°	857.4	875.4	911.3	956.9	973.5
47.5°	807.6	825.6	868.4	916.8	932.0
50°	757.8	775.8	824.2	875.4	893.3
52.5°	703.9	727.4	782.7	833.9	851.8
55°	655.5	677.6	734.3	792.4	811.7
57.5°	600.2	626.4	688.7	749.5	770.3
60°	549.0	576.7	643.0	705.3	726.0
62.5°	496.4	526.9	597.4	661.0	684.5
65°	439.8	477.1	551.8	616.8	640.3
67.5°	388.6	427.3	506.1	572.5	593.2
70°	330.5	377.5	457.7	524.1	547.6
72.5°	280.7	327.7	412.1	477.1	500.6
75°	228.2	279.3	363.7	428.7	449.4
77.5°	175.6	232.3	316.7	366.5	373.4
80°	125.8	185.3	262.7	291.8	301.5
82.5°	88.5	142.4	193.6	213.0	218.5
85°	48.4	94.0	121.7	130.0	130.0
87.5°	20.7	40.1	48.4	49.8	51.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)