

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: P276212

Luminaire Tested: **24CZ2-45HE-UNV-L92765-W2A1-U-6500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276212
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-L92765-W2A1-U-6500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4027.1 lumens
Efficiency: N/A
Efficacy: 122.3 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

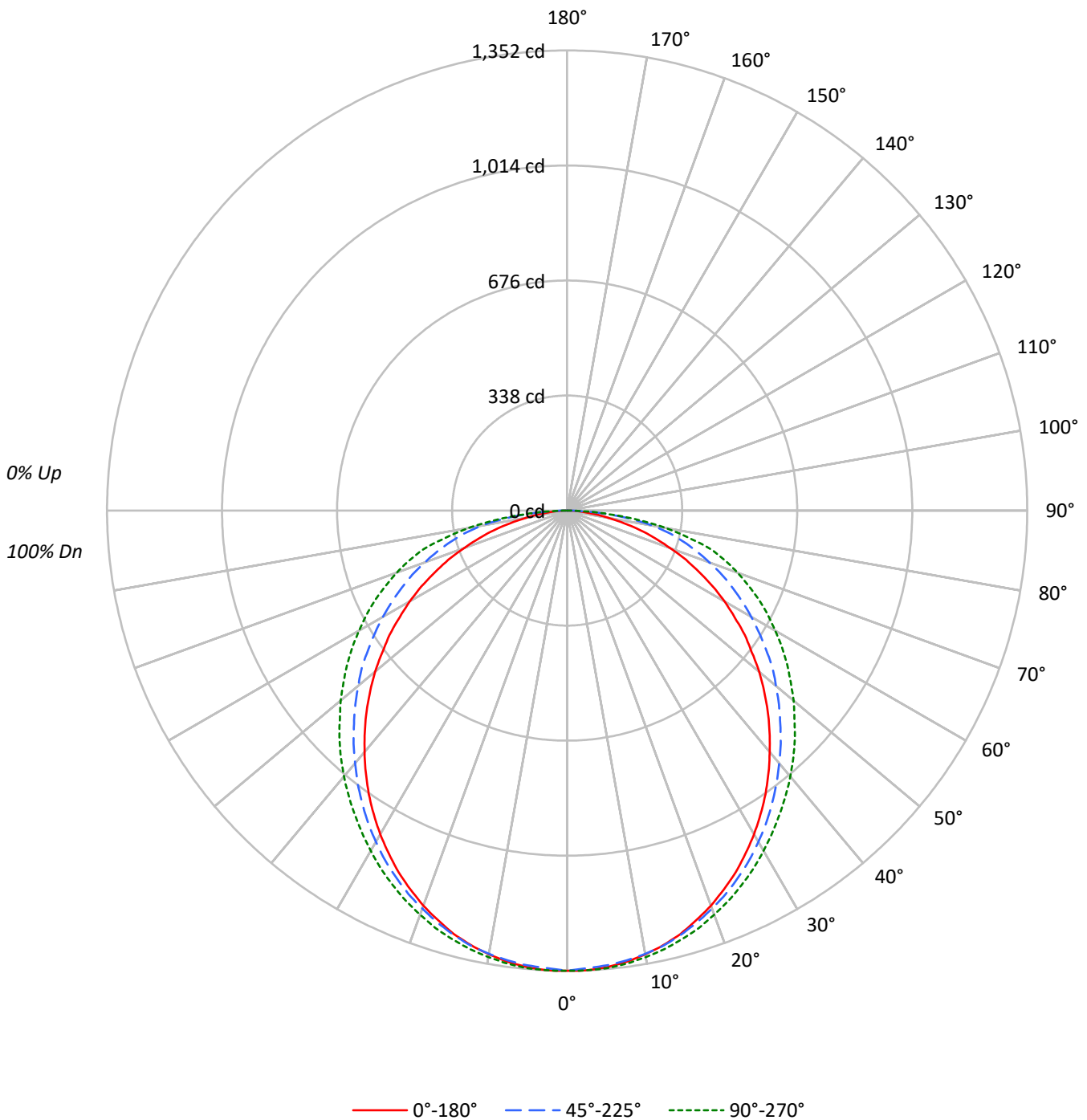
Input Watts (W): 32.922
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1819	1819	1819
5°	1819	1812	1823
10°	1809	1807	1820
15°	1794	1797	1816
20°	1769	1782	1809
25°	1740	1766	1802
30°	1706	1746	1794
35°	1669	1724	1788
40°	1626	1702	1792
45°	1586	1685	1800
50°	1542	1677	1817
55°	1495	1674	1851
60°	1436	1682	1899
65°	1361	1707	1981
70°	1264	1750	2094
75°	1153	1838	2271
80°	948	1979	2270
85°	726	1826	1950



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.9	3.2
10°-20°	365.1	9.1
20°-30°	549.4	13.6
30°-40°	658.4	16.3
40°-50°	686.1	17.0
50°-60°	638.3	15.9
60°-70°	525.7	13.1
70°-80°	358.1	8.9
80°-90°	118.2	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°	1042.3	25.9
0°-40°	1700.7	42.2
0°-60°	3025.1	75.1
0°-90°	4027.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4027.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1352	1352	1352	1352	1352	
5°	1347	1347	1341	1348	1349	128
15°	1288	1289	1290	1302	1304	363
25°	1172	1177	1190	1210	1214	540
35°	1016	1028	1050	1078	1089	635
45°	833	851	886	930	946	643
55°	637	659	714	770	789	568
65°	427	464	536	599	622	424
75°	222	272	354	417	437	234
85°	47	91	118	126	126	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1352.1	1352.1	1352.1	1352.1	1352.1
2.5°	1352.1	1352.1	1345.4	1352.1	1352.1
5°	1346.7	1346.7	1341.3	1348.1	1349.4
7.5°	1337.3	1338.7	1333.3	1341.3	1342.7
10°	1323.9	1325.2	1322.5	1330.6	1331.9
12.5°	1307.7	1309.1	1309.1	1318.5	1319.8
15°	1287.6	1288.9	1290.3	1302.4	1303.7
17.5°	1262.0	1266.1	1268.8	1283.5	1286.2
20°	1235.2	1239.2	1244.6	1260.7	1263.4
22.5°	1204.2	1209.6	1219.0	1236.5	1240.5
25°	1172.0	1177.4	1189.5	1209.6	1213.7
27.5°	1135.7	1143.8	1158.6	1180.1	1185.4
30°	1098.1	1106.1	1123.6	1146.5	1154.5
32.5°	1057.8	1068.5	1088.7	1114.2	1122.3
35°	1016.1	1028.2	1049.7	1077.9	1088.7
37.5°	971.7	985.2	1010.7	1041.6	1055.1
40°	926.0	942.2	969.0	1005.3	1020.1
42.5°	880.3	895.1	928.7	967.7	983.8
45°	833.3	850.8	885.7	930.1	946.2
47.5°	784.9	802.4	844.0	891.1	905.9
50°	736.5	754.0	801.0	850.8	868.2
52.5°	684.1	707.0	760.7	810.4	827.9
55°	637.1	658.6	713.7	770.1	788.9
57.5°	583.3	608.8	669.3	728.5	748.6
60°	533.6	560.5	625.0	685.5	705.6
62.5°	482.5	512.1	580.6	642.4	665.3
65°	427.4	463.7	536.3	599.4	622.3
67.5°	377.7	415.3	491.9	556.4	576.6
70°	321.2	366.9	444.9	509.4	532.2
72.5°	272.8	318.5	400.5	463.7	486.5
75°	221.8	271.5	353.5	416.6	436.8
77.5°	170.7	225.8	307.8	356.2	362.9
80°	122.3	180.1	255.4	283.6	293.0
82.5°	86.0	138.4	188.2	207.0	212.4
85°	47.0	91.4	118.3	126.3	126.3
87.5°	20.2	39.0	47.0	48.4	49.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)