

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: P276579

Luminaire Tested: **24CZ2-45-S-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276579
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-L82765-W2A1-U-2700K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4134.0 lumens
Efficiency: N/A
Efficacy: 118.2 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

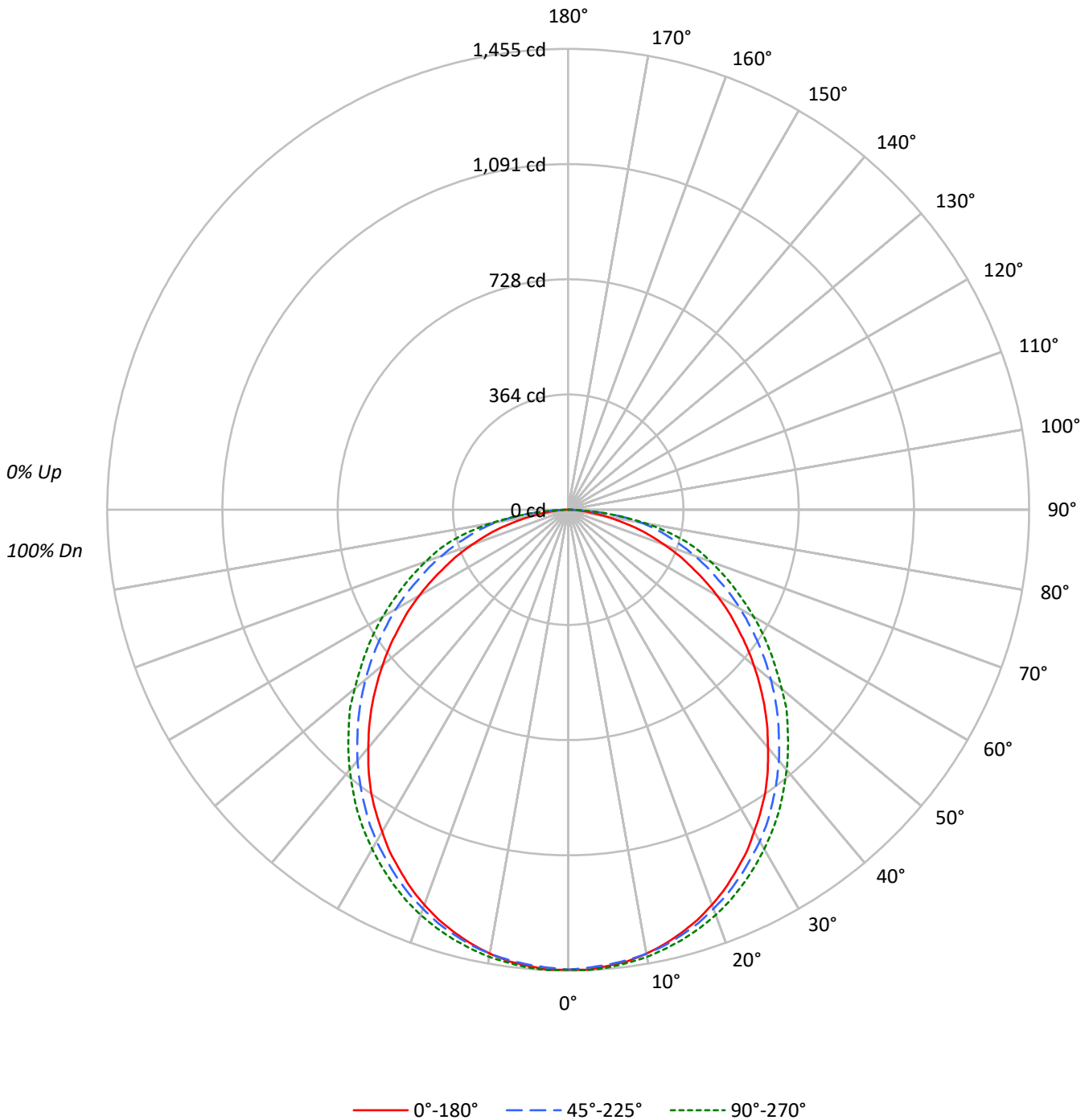
Input Watts (W): 34.968
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69					69			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42					42			
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1954	1954	1954
5°	1953	1947	1960
10°	1945	1945	1959
15°	1926	1935	1955
20°	1901	1920	1950
25°	1866	1901	1938
30°	1824	1879	1922
35°	1784	1848	1907
40°	1723	1817	1884
45°	1667	1782	1864
50°	1602	1748	1842
55°	1531	1716	1824
60°	1459	1689	1820
65°	1367	1660	1831
70°	1266	1668	1880
75°	1133	1700	1986
80°	916	1801	1943
85°	689	1581	1541



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.5	3.3
10°-20°	392.9	9.5
20°-30°	590.6	14.3
30°-40°	703.4	17.0
40°-50°	719.9	17.4
50°-60°	648.2	15.7
60°-70°	509.0	12.3
70°-80°	330.4	8.0
80°-90°	102.2	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°	1120.9	27.1
0°-40°	1824.4	44.1
0°-60°	3192.5	77.2
0°-90°	4134.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4134.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1452	1452	1452	1452	1452	
5°	1446	1448	1442	1450	1451	137
15°	1383	1387	1389	1401	1404	390
25°	1257	1267	1280	1301	1305	579
35°	1086	1099	1125	1153	1161	677
45°	876	897	936	972	980	675
55°	653	682	731	770	777	585
65°	429	462	521	565	575	427
75°	218	260	327	372	382	231
85°	45	83	102	100	100	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1452.3	1452.3	1452.3	1452.3	1452.3
2.5°	1453.6	1453.6	1447.1	1453.6	1454.9
5°	1445.7	1448.4	1441.8	1449.7	1451.0
7.5°	1437.9	1437.9	1433.9	1441.8	1443.1
10°	1423.4	1424.7	1423.4	1432.6	1433.9
12.5°	1405.0	1407.7	1409.0	1418.2	1419.5
15°	1382.7	1386.7	1389.3	1401.1	1403.7
17.5°	1357.8	1361.7	1368.3	1381.4	1384.0
20°	1327.6	1332.8	1340.7	1357.8	1361.7
22.5°	1294.7	1300.0	1313.1	1328.9	1335.4
25°	1256.7	1267.2	1280.3	1301.3	1305.2
27.5°	1218.6	1227.8	1244.8	1267.2	1272.4
30°	1173.9	1188.4	1209.4	1231.7	1237.0
32.5°	1130.6	1145.0	1170.0	1193.6	1200.2
35°	1085.9	1099.1	1125.3	1152.9	1160.8
37.5°	1034.7	1051.8	1080.7	1108.3	1116.2
40°	980.9	1001.9	1034.7	1063.6	1072.8
42.5°	929.7	952.0	984.8	1016.4	1026.9
45°	875.9	896.9	936.3	971.7	979.6
47.5°	820.7	844.3	886.4	921.8	934.9
50°	765.5	790.5	835.1	871.9	879.8
52.5°	710.4	736.7	783.9	823.3	827.3
55°	652.6	681.5	731.4	769.5	777.4
57.5°	600.1	625.0	678.9	718.3	727.5
60°	542.3	569.9	627.7	664.4	676.3
62.5°	487.2	516.1	576.5	613.2	623.7
65°	429.4	462.2	521.3	564.6	575.1
67.5°	379.5	411.0	474.0	516.1	526.6
70°	321.7	357.2	424.1	467.5	478.0
72.5°	271.8	308.6	375.6	417.6	433.3
75°	218.0	260.0	327.0	371.6	382.1
77.5°	165.5	214.0	282.3	316.5	316.5
80°	118.2	169.4	232.4	248.2	250.8
82.5°	77.5	127.4	172.0	170.7	170.7
85°	44.6	82.7	102.4	99.8	99.8
87.5°	17.1	34.1	36.8	36.8	35.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)