

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: P276167

Luminaire Tested: **24CZ2-45-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276167
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: 24CZ2-45-UNV-L82765-W2A1-U-6500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4481.2 lumens
Efficiency: N/A
Efficacy: 122.6 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

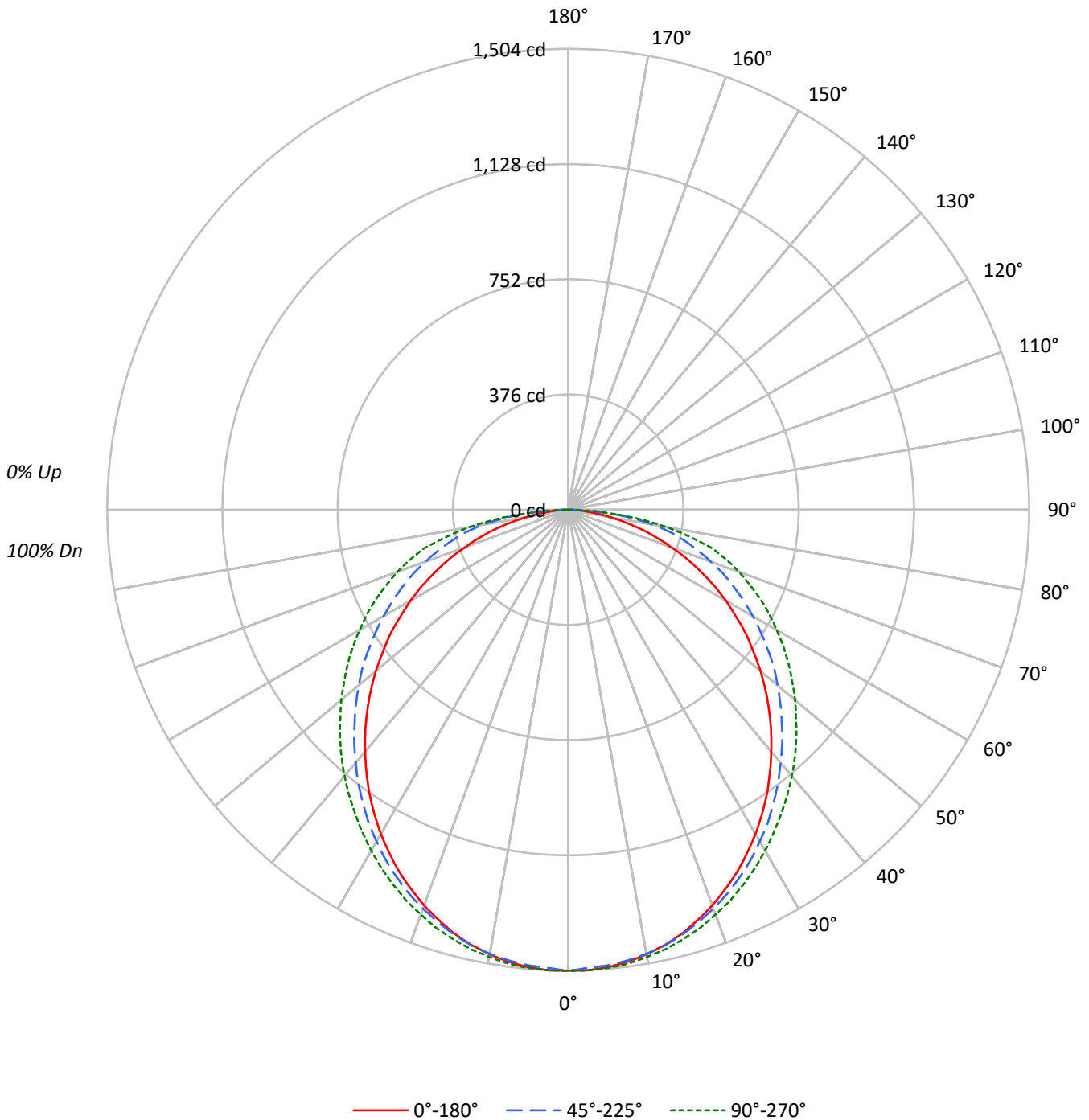
Input Watts (W): 36.549
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2024	2024	2024
5°	2024	2016	2028
10°	2013	2011	2025
15°	1996	2000	2021
20°	1968	1983	2013
25°	1936	1965	2005
30°	1898	1943	1996
35°	1857	1918	1990
40°	1810	1894	1994
45°	1764	1875	2003
50°	1716	1866	2022
55°	1663	1863	2059
60°	1598	1871	2113
65°	1514	1900	2205
70°	1406	1947	2330
75°	1283	2045	2527
80°	1055	2202	2526
85°	807	2032	2171



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.3	3.2
10°-20°	406.2	9.1
20°-30°	611.3	13.6
30°-40°	732.6	16.3
40°-50°	763.5	17.0
50°-60°	710.3	15.9
60°-70°	585.0	13.1
70°-80°	398.4	8.9
80°-90°	131.5	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°	1159.9	25.9
0°-40°	1892.5	42.2
0°-60°	3366.2	75.1
0°-90°	4481.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4481.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1504	1504	1504	1504	1504	
5°	1499	1499	1493	1500	1502	142
15°	1433	1434	1436	1449	1451	404
25°	1304	1310	1324	1346	1350	600
35°	1131	1144	1168	1200	1211	707
45°	927	947	986	1035	1053	715
55°	709	733	794	857	878	632
65°	476	516	597	667	692	472
75°	247	302	393	464	486	260
85°	52	102	132	141	141	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1504.5	1504.5	1504.5	1504.5	1504.5
2.5°	1504.5	1504.5	1497.1	1504.5	1504.5
5°	1498.6	1498.6	1492.6	1500.1	1501.6
7.5°	1488.1	1489.6	1483.6	1492.6	1494.1
10°	1473.1	1474.6	1471.6	1480.6	1482.1
12.5°	1455.2	1456.7	1456.7	1467.2	1468.7
15°	1432.8	1434.3	1435.8	1449.2	1450.7
17.5°	1404.3	1408.8	1411.8	1428.3	1431.3
20°	1374.4	1378.9	1384.9	1402.8	1405.8
22.5°	1340.0	1346.0	1356.5	1375.9	1380.4
25°	1304.1	1310.1	1323.6	1346.0	1350.5
27.5°	1263.8	1272.7	1289.2	1313.1	1319.1
30°	1221.9	1230.9	1250.3	1275.7	1284.7
32.5°	1177.0	1189.0	1211.4	1239.8	1248.8
35°	1130.7	1144.1	1168.0	1199.5	1211.4
37.5°	1081.3	1096.3	1124.7	1159.1	1174.0
40°	1030.5	1048.4	1078.3	1118.7	1135.1
42.5°	979.6	996.1	1033.4	1076.8	1094.8
45°	927.3	946.7	985.6	1034.9	1052.9
47.5°	873.4	892.9	939.2	991.6	1008.0
50°	819.6	839.0	891.4	946.7	966.1
52.5°	761.2	786.7	846.5	901.8	921.3
55°	708.9	732.8	794.2	857.0	877.9
57.5°	649.1	677.5	744.8	810.6	833.0
60°	593.7	623.7	695.4	762.7	785.2
62.5°	536.9	569.8	646.1	714.9	740.3
65°	475.6	516.0	596.7	667.0	692.5
67.5°	420.3	462.1	547.4	619.2	641.6
70°	357.4	408.3	495.0	566.8	592.2
72.5°	303.6	354.5	445.7	516.0	541.4
75°	246.8	302.1	393.3	463.6	486.1
77.5°	189.9	251.3	342.5	396.3	403.8
80°	136.1	200.4	284.2	315.6	326.0
82.5°	95.7	154.0	209.4	230.3	236.3
85°	52.3	101.7	131.6	140.6	140.6
87.5°	22.4	43.4	52.3	53.8	55.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)