

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: P276220

Luminaire Tested: **24CZ2-50HE-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276220
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: 24CZ2-50HE-UNV-L92765-W2A1-U-5700K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4482.1 lumens
Efficiency: N/A
Efficacy: 121.7 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

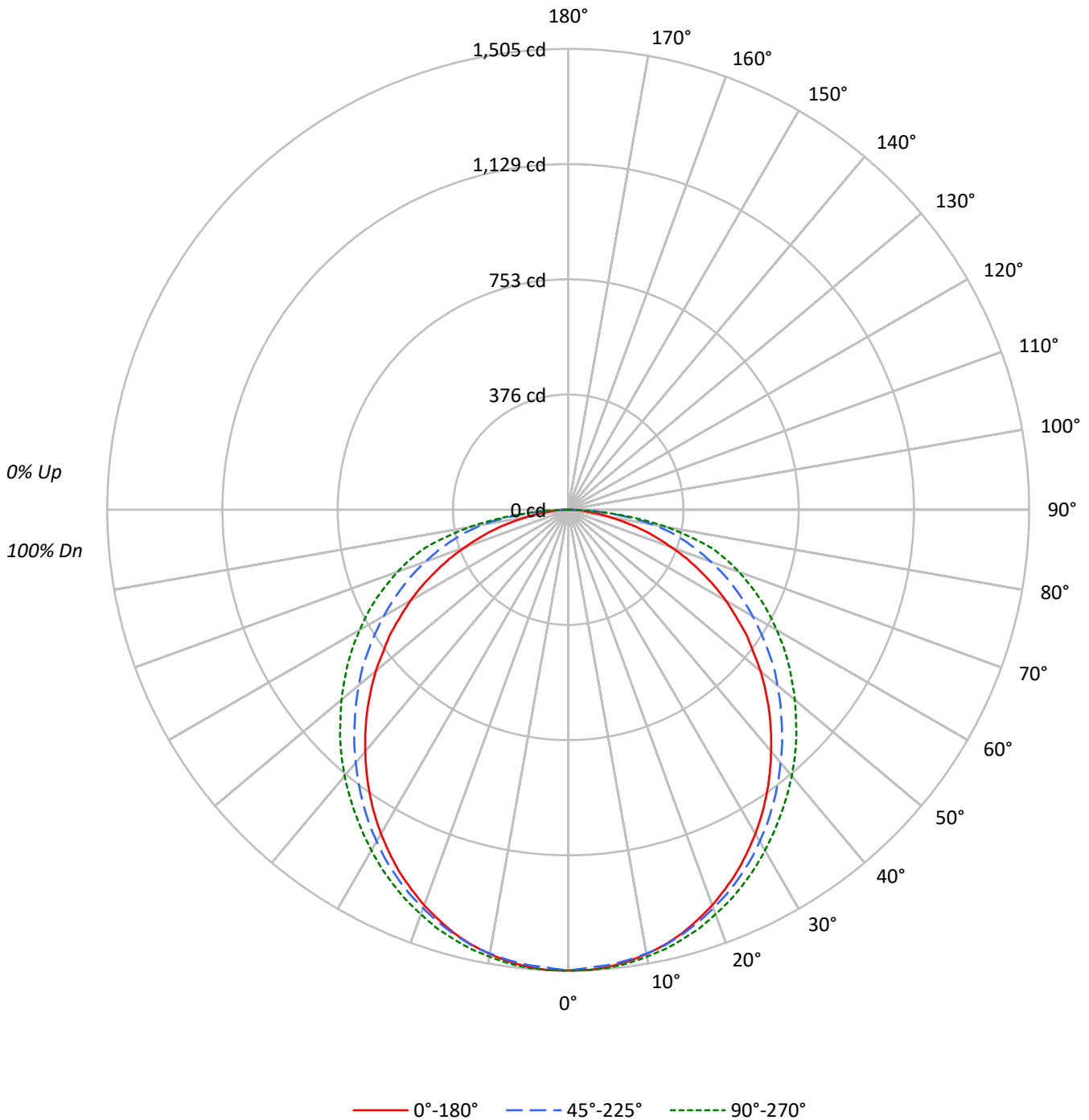
Input Watts (W): 36.828
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2025	2025	2025
5°	2024	2016	2029
10°	2013	2011	2025
15°	1996	2000	2021
20°	1968	1983	2013
25°	1936	1965	2005
30°	1899	1943	1996
35°	1858	1919	1990
40°	1810	1894	1994
45°	1765	1876	2004
50°	1716	1866	2023
55°	1663	1863	2060
60°	1598	1872	2113
65°	1514	1900	2205
70°	1406	1948	2330
75°	1283	2045	2528
80°	1055	2202	2527
85°	809	2032	2171



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.3	3.2
10°-20°	406.3	9.1
20°-30°	611.5	13.6
30°-40°	732.8	16.3
40°-50°	763.6	17.0
50°-60°	710.5	15.9
60°-70°	585.1	13.1
70°-80°	398.5	8.9
80°-90°	131.6	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°	1160.1	25.9
0°-40°	1892.9	42.2
0°-60°	3366.9	75.1
0°-90°	4482.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4482.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1505	1505	1505	1505	1505	
5°	1499	1499	1493	1500	1502	142
15°	1433	1435	1436	1450	1451	404
25°	1304	1310	1324	1346	1351	600
35°	1131	1144	1168	1200	1212	707
45°	928	947	986	1035	1053	715
55°	709	733	794	857	878	632
65°	476	516	597	667	693	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°	1504.9	1504.9	1504.9	1504.9	1504.9
2.5°	1504.9	1504.9	1497.4	1504.9	1504.9
5°	1498.9	1498.9	1492.9	1500.4	1501.9
7.5°	1488.4	1489.9	1483.9	1492.9	1494.4
10°	1473.5	1474.9	1472.0	1480.9	1482.4
12.5°	1455.5	1457.0	1457.0	1467.5	1469.0
15°	1433.1	1434.6	1436.1	1449.5	1451.0
17.5°	1404.6	1409.1	1412.1	1428.6	1431.6
20°	1374.7	1379.2	1385.2	1403.1	1406.1
22.5°	1340.3	1346.3	1356.8	1376.2	1380.7
25°	1304.4	1310.4	1323.9	1346.3	1350.8
27.5°	1264.0	1273.0	1289.5	1313.4	1319.4
30°	1222.1	1231.1	1250.6	1276.0	1285.0
32.5°	1177.3	1189.2	1211.7	1240.1	1249.1
35°	1130.9	1144.4	1168.3	1199.7	1211.7
37.5°	1081.5	1096.5	1124.9	1159.3	1174.3
40°	1030.7	1048.6	1078.5	1118.9	1135.4
42.5°	979.8	996.3	1033.7	1077.0	1095.0
45°	927.5	946.9	985.8	1035.2	1053.1
47.5°	873.6	893.0	939.4	991.8	1008.2
50°	819.7	839.2	891.6	946.9	966.3
52.5°	761.4	786.8	846.7	902.0	921.5
55°	709.1	733.0	794.3	857.1	878.1
57.5°	649.2	677.6	745.0	810.8	833.2
60°	593.9	623.8	695.6	762.9	785.3
62.5°	537.0	569.9	646.2	715.0	740.5
65°	475.7	516.1	596.9	667.2	692.6
67.5°	420.3	462.2	547.5	619.3	641.7
70°	357.5	408.4	495.1	566.9	592.4
72.5°	303.7	354.5	445.8	516.1	541.5
75°	246.8	302.2	393.4	463.7	486.2
77.5°	190.0	251.3	342.6	396.4	403.9
80°	136.1	200.4	284.2	315.6	326.1
82.5°	95.7	154.1	209.4	230.4	236.4
85°	52.4	101.7	131.6	140.6	140.6
87.5°	22.4	43.4	52.4	53.9	55.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)