

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: P276216

Luminaire Tested: **24CZ2-50HE-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276216
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-4000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4199.3 lumens
Efficiency: N/A
Efficacy: 116.4 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

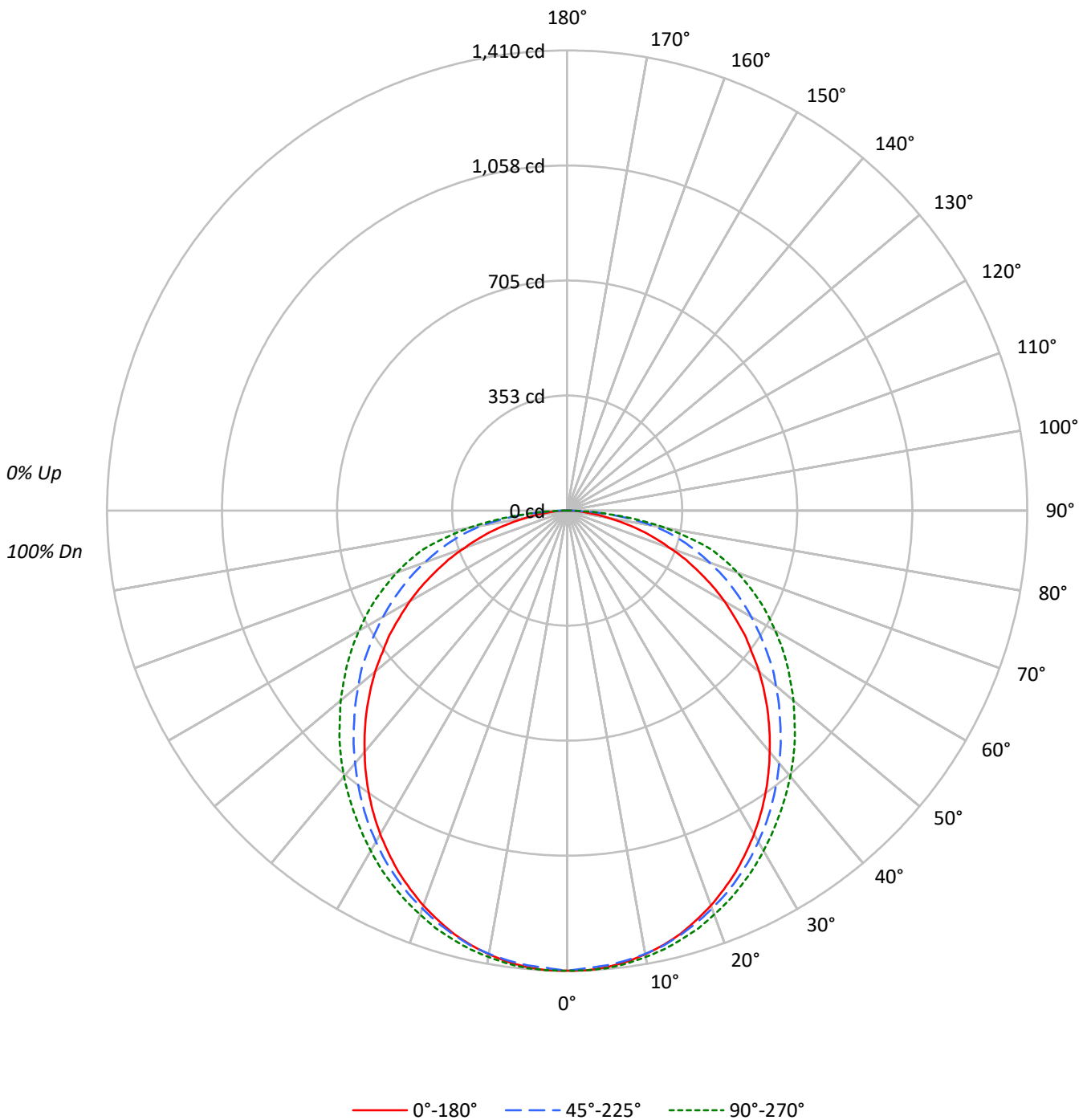
Input Watts (W): 36.084
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1897	1897	1897
5°	1897	1889	1900
10°	1886	1884	1898
15°	1870	1874	1894
20°	1844	1858	1886
25°	1814	1841	1879
30°	1779	1820	1870
35°	1740	1798	1865
40°	1696	1775	1868
45°	1653	1757	1877
50°	1608	1748	1895
55°	1558	1746	1930
60°	1497	1754	1980
65°	1419	1780	2066
70°	1318	1825	2183
75°	1202	1916	2368
80°	988	2063	2367
85°	758	1903	2033



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.3	3.2
10°-20°	380.7	9.1
20°-30°	572.9	13.6
30°-40°	686.5	16.3
40°-50°	715.4	17.0
50°-60°	665.6	15.9
60°-70°	548.2	13.1
70°-80°	373.4	8.9
80°-90°	123.3	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°	1086.9	25.9
0°-40°	1773.4	42.2
0°-60°	3154.4	75.1
0°-90°	4199.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4199.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1410	1410	1410	1410	1410	
5°	1404	1404	1399	1406	1407	133
15°	1343	1344	1345	1358	1359	378
25°	1222	1228	1240	1261	1266	563
35°	1060	1072	1095	1124	1135	662
45°	869	887	924	970	987	670
55°	664	687	744	803	823	592
65°	446	484	559	625	649	442
75°	231	283	369	434	456	244
85°	49	95	123	132	132	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1409.9	1409.9	1409.9	1409.9	1409.9
2.5°	1409.9	1409.9	1402.9	1409.9	1409.9
5°	1404.3	1404.3	1398.7	1405.7	1407.1
7.5°	1394.5	1395.9	1390.3	1398.7	1400.1
10°	1380.5	1381.9	1379.1	1387.5	1388.9
12.5°	1363.6	1365.1	1365.1	1374.9	1376.3
15°	1342.6	1344.0	1345.4	1358.0	1359.4
17.5°	1316.0	1320.2	1323.0	1338.4	1341.2
20°	1288.0	1292.2	1297.8	1314.6	1317.4
22.5°	1255.7	1261.3	1271.2	1289.4	1293.6
25°	1222.1	1227.7	1240.3	1261.3	1265.5
27.5°	1184.3	1192.7	1208.1	1230.5	1236.1
30°	1145.0	1153.4	1171.6	1195.5	1203.9
32.5°	1103.0	1114.2	1135.2	1161.8	1170.2
35°	1059.5	1072.1	1094.6	1124.0	1135.2
37.5°	1013.3	1027.3	1053.9	1086.2	1100.2
40°	965.6	982.4	1010.5	1048.3	1063.7
42.5°	918.0	933.4	968.4	1009.1	1025.9
45°	868.9	887.1	923.6	969.8	986.6
47.5°	818.5	836.7	880.1	929.2	944.6
50°	768.0	786.2	835.3	887.1	905.4
52.5°	713.4	737.2	793.2	845.1	863.3
55°	664.3	686.7	744.2	803.1	822.7
57.5°	608.2	634.9	697.9	759.6	780.6
60°	556.4	584.4	651.7	714.8	735.8
62.5°	503.1	534.0	605.4	669.9	693.7
65°	445.7	483.5	559.2	625.1	648.9
67.5°	393.8	433.1	512.9	580.2	601.2
70°	335.0	382.6	463.9	531.2	555.0
72.5°	284.5	332.2	417.6	483.5	507.3
75°	231.2	283.1	368.6	434.5	455.5
77.5°	178.0	235.5	320.9	371.4	378.4
80°	127.5	187.8	266.3	295.7	305.5
82.5°	89.7	144.4	196.2	215.8	221.4
85°	49.1	95.3	123.3	131.7	131.7
87.5°	21.0	40.6	49.1	50.5	51.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)