

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: P275988

Luminaire Tested: **24CZ2-50HE-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P275988
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-L93050-W2A1-U-3500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4041.4 lumens
Efficiency: N/A
Efficacy: 111.1 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

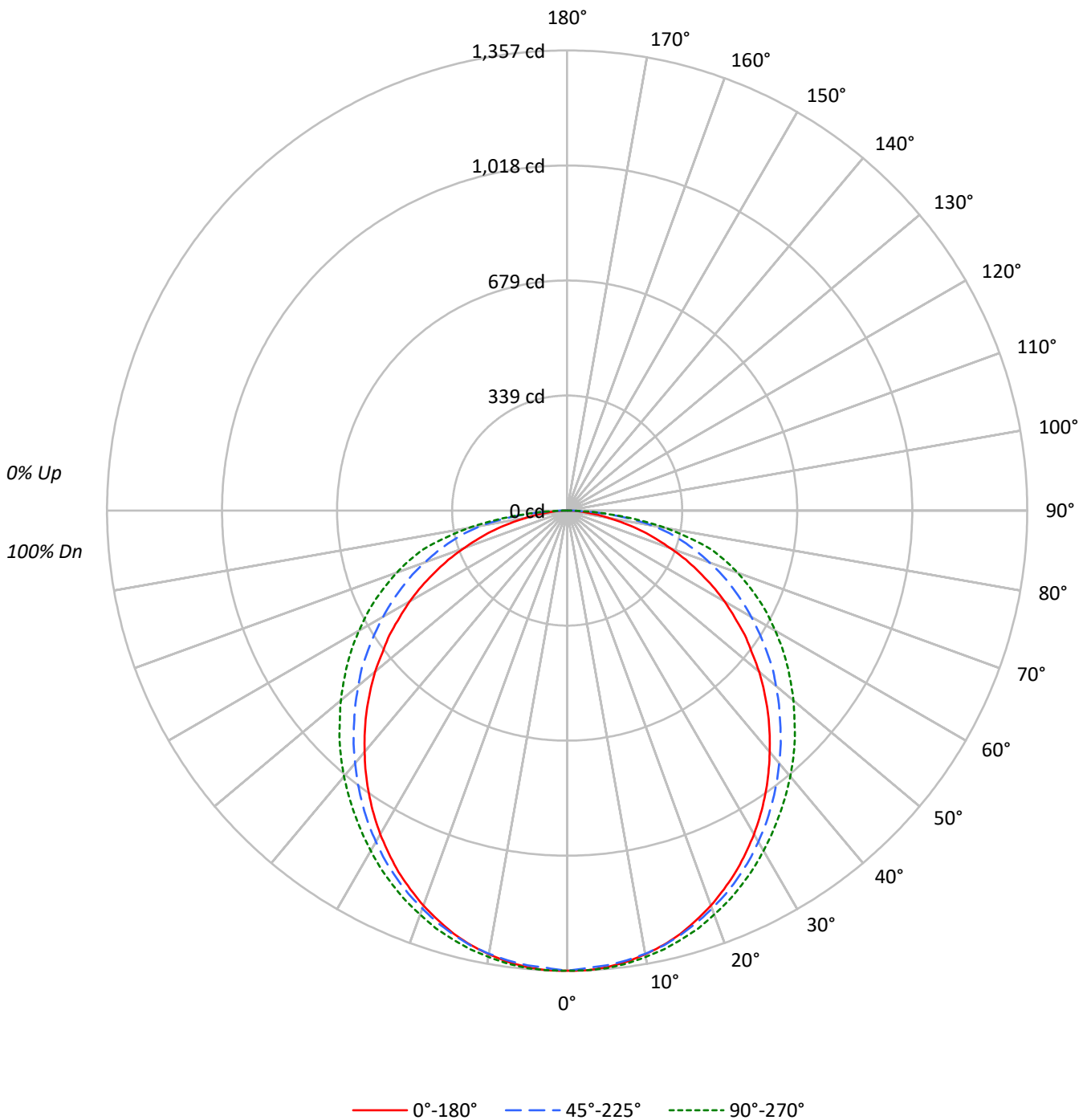
Input Watts (W): 36.390528
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1826	1826	1826
5°	1825	1818	1829
10°	1815	1813	1826
15°	1800	1804	1822
20°	1775	1788	1815
25°	1746	1772	1808
30°	1712	1752	1800
35°	1675	1730	1794
40°	1632	1708	1798
45°	1591	1691	1807
50°	1547	1683	1824
55°	1500	1680	1857
60°	1441	1688	1905
65°	1365	1713	1988
70°	1268	1757	2101
75°	1157	1844	2279
80°	951	1986	2278
85°	729	1832	1958



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.3	3.2
10°-20°	366.4	9.1
20°-30°	551.3	13.6
30°-40°	660.7	16.3
40°-50°	688.5	17.0
50°-60°	640.6	15.9
60°-70°	527.6	13.1
70°-80°	359.3	8.9
80°-90°	118.6	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°	1046.0	25.9
0°-40°	1706.7	42.2
0°-60°	3035.8	75.1
0°-90°	4041.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4041.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1357	1357	1357	1357	1357	
5°	1352	1352	1346	1353	1354	128
15°	1292	1294	1295	1307	1308	364
25°	1176	1182	1194	1214	1218	541
35°	1020	1032	1053	1082	1092	637
45°	836	854	889	933	950	645
55°	639	661	716	773	792	570
65°	429	465	538	602	624	426
75°	223	272	355	418	438	235
85°	47	92	119	127	127	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1356.9	1356.9	1356.9	1356.9	1356.9
2.5°	1356.9	1356.9	1350.1	1356.9	1356.9
5°	1351.5	1351.5	1346.1	1352.8	1354.2
7.5°	1342.1	1343.4	1338.0	1346.1	1347.4
10°	1328.6	1329.9	1327.2	1335.3	1336.7
12.5°	1312.4	1313.7	1313.7	1323.2	1324.5
15°	1292.1	1293.5	1294.8	1307.0	1308.3
17.5°	1266.5	1270.6	1273.3	1288.1	1290.8
20°	1239.5	1243.6	1249.0	1265.2	1267.9
22.5°	1208.5	1213.9	1223.4	1240.9	1244.9
25°	1176.1	1181.5	1193.7	1213.9	1218.0
27.5°	1139.7	1147.8	1162.7	1184.2	1189.6
30°	1102.0	1110.1	1127.6	1150.5	1158.6
32.5°	1061.5	1072.3	1092.5	1118.2	1126.2
35°	1019.7	1031.8	1053.4	1081.7	1092.5
37.5°	975.2	988.7	1014.3	1045.3	1058.8
40°	929.3	945.5	972.5	1008.9	1023.7
42.5°	883.5	898.3	932.0	971.1	987.3
45°	836.3	853.8	888.9	933.4	949.6
47.5°	787.7	805.2	847.0	894.3	909.1
50°	739.1	756.7	803.9	853.8	871.3
52.5°	686.5	709.5	763.4	813.3	830.9
55°	639.3	660.9	716.2	772.9	791.7
57.5°	585.4	611.0	671.7	731.0	751.3
60°	535.5	562.4	627.2	687.9	708.1
62.5°	484.2	513.9	582.7	644.7	667.7
65°	428.9	465.3	538.2	601.6	624.5
67.5°	379.0	416.8	493.7	558.4	578.6
70°	322.4	368.2	446.5	511.2	534.1
72.5°	273.8	319.7	401.9	465.3	488.3
75°	222.6	272.5	354.7	418.1	438.4
77.5°	171.3	226.6	308.9	357.4	364.2
80°	122.7	180.7	256.3	284.6	294.0
82.5°	86.3	138.9	188.8	207.7	213.1
85°	47.2	91.7	118.7	126.8	126.8
87.5°	20.2	39.1	47.2	48.6	49.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)