

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: P275986

Luminaire Tested: **24CZ2-45HE-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P275986
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: 24CZ2-45HE-UNV-L93050-W2A1-U-5000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3962.8 lumens
Efficiency: N/A
Efficacy: 121.0 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

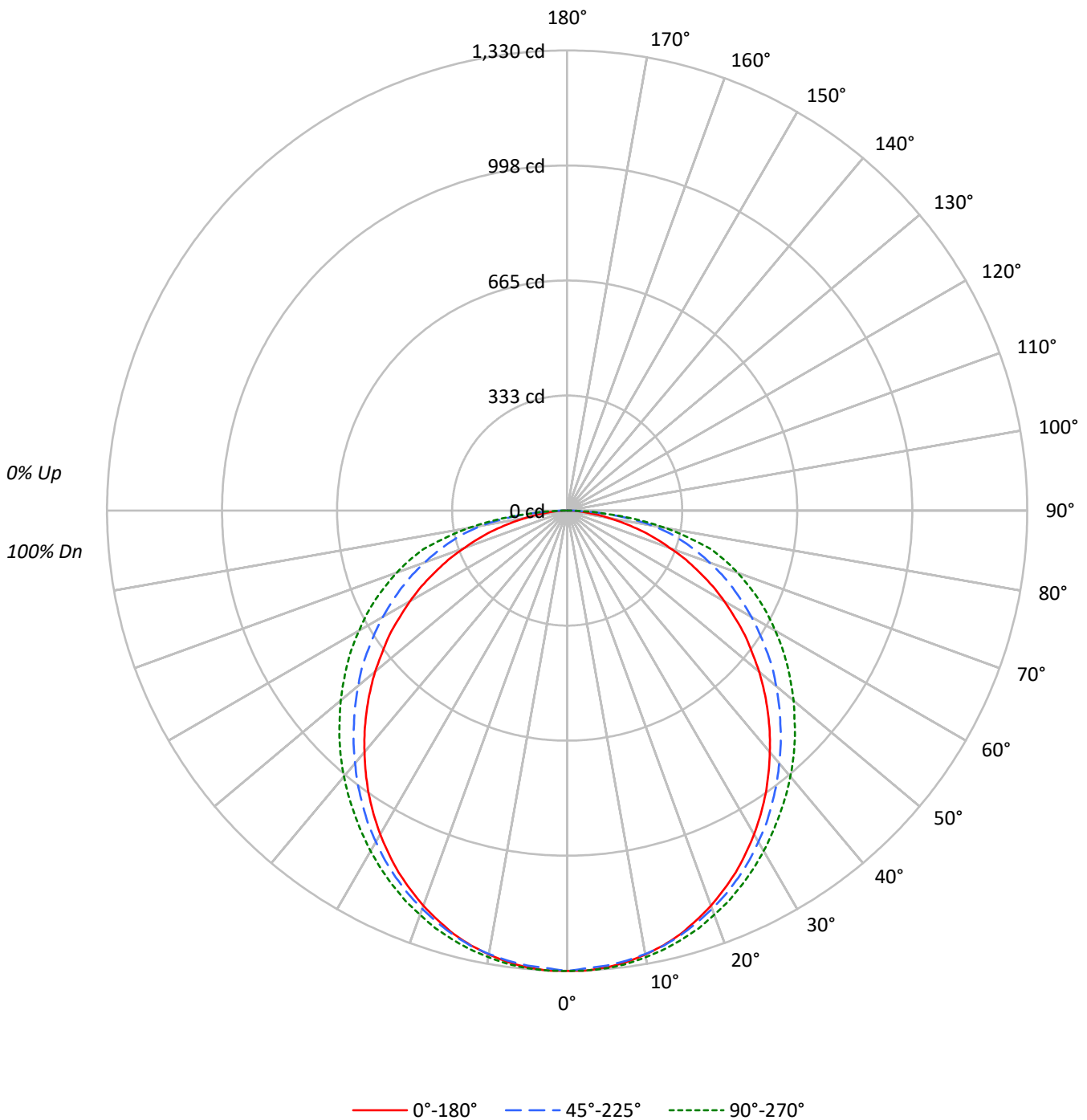
Input Watts (W): 32.754228
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1790	1790	1790
5°	1790	1783	1793
10°	1780	1778	1791
15°	1765	1769	1787
20°	1740	1754	1780
25°	1712	1738	1773
30°	1679	1718	1765
35°	1642	1697	1760
40°	1600	1675	1763
45°	1560	1658	1772
50°	1517	1650	1788
55°	1471	1647	1821
60°	1413	1655	1868
65°	1339	1680	1949
70°	1244	1722	2060
75°	1134	1808	2234
80°	933	1947	2234
85°	715	1797	1919



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.8	3.2
10°-20°	359.2	9.1
20°-30°	540.6	13.6
30°-40°	647.9	16.3
40°-50°	675.1	17.0
50°-60°	628.1	15.9
60°-70°	517.3	13.1
70°-80°	352.3	8.9
80°-90°	116.3	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°	1025.7	25.9
0°-40°	1673.5	42.2
0°-60°	2976.8	75.1
0°-90°	3962.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3962.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1330	1330	1330	1330	1330	
5°	1325	1325	1320	1326	1328	126
15°	1267	1268	1270	1282	1283	357
25°	1153	1159	1170	1190	1194	531
35°	1000	1012	1033	1061	1071	625
45°	820	837	872	915	931	632
55°	627	648	702	758	776	559
65°	421	456	528	590	612	417
75°	218	267	348	410	430	230
85°	46	90	116	124	124	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1330.5	1330.5	1330.5	1330.5	1330.5
2.5°	1330.5	1330.5	1323.9	1330.5	1330.5
5°	1325.2	1325.2	1319.9	1326.5	1327.8
7.5°	1315.9	1317.3	1312.0	1319.9	1321.2
10°	1302.7	1304.0	1301.4	1309.3	1310.7
12.5°	1286.8	1288.2	1288.2	1297.4	1298.7
15°	1267.0	1268.3	1269.7	1281.6	1282.9
17.5°	1241.9	1245.8	1248.5	1263.0	1265.7
20°	1215.4	1219.4	1224.7	1240.6	1243.2
22.5°	1185.0	1190.3	1199.6	1216.8	1220.7
25°	1153.3	1158.6	1170.5	1190.3	1194.3
27.5°	1117.6	1125.5	1140.0	1161.2	1166.5
30°	1080.5	1088.5	1105.7	1128.1	1136.1
32.5°	1040.9	1051.4	1071.3	1096.4	1104.3
35°	999.9	1011.8	1032.9	1060.7	1071.3
37.5°	956.2	969.4	994.6	1025.0	1038.2
40°	911.2	927.1	953.6	989.3	1003.8
42.5°	866.3	880.8	913.9	952.2	968.1
45°	820.0	837.2	871.6	915.2	931.1
47.5°	772.4	789.6	830.6	876.9	891.4
50°	724.8	742.0	788.2	837.2	854.4
52.5°	673.2	695.7	748.6	797.5	814.7
55°	626.9	648.1	702.3	757.8	776.3
57.5°	574.0	599.1	658.6	716.8	736.7
60°	525.1	551.5	615.0	674.5	694.3
62.5°	474.8	503.9	571.3	632.2	654.7
65°	420.6	456.3	527.7	589.9	612.3
67.5°	371.6	408.7	484.1	547.5	567.4
70°	316.1	361.1	437.8	501.2	523.7
72.5°	268.5	313.4	394.1	456.3	478.8
75°	218.2	267.2	347.8	410.0	429.8
77.5°	168.0	222.2	302.9	350.5	357.1
80°	120.4	177.2	251.3	279.1	288.3
82.5°	84.6	136.2	185.2	203.7	209.0
85°	46.3	89.9	116.4	124.3	124.3
87.5°	19.8	38.4	46.3	47.6	48.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)