

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: P275982

Luminaire Tested: **24CZ2-45HE-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P275982
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-3000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3300.9 lumens
Efficiency: N/A
Efficacy: 102.6 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

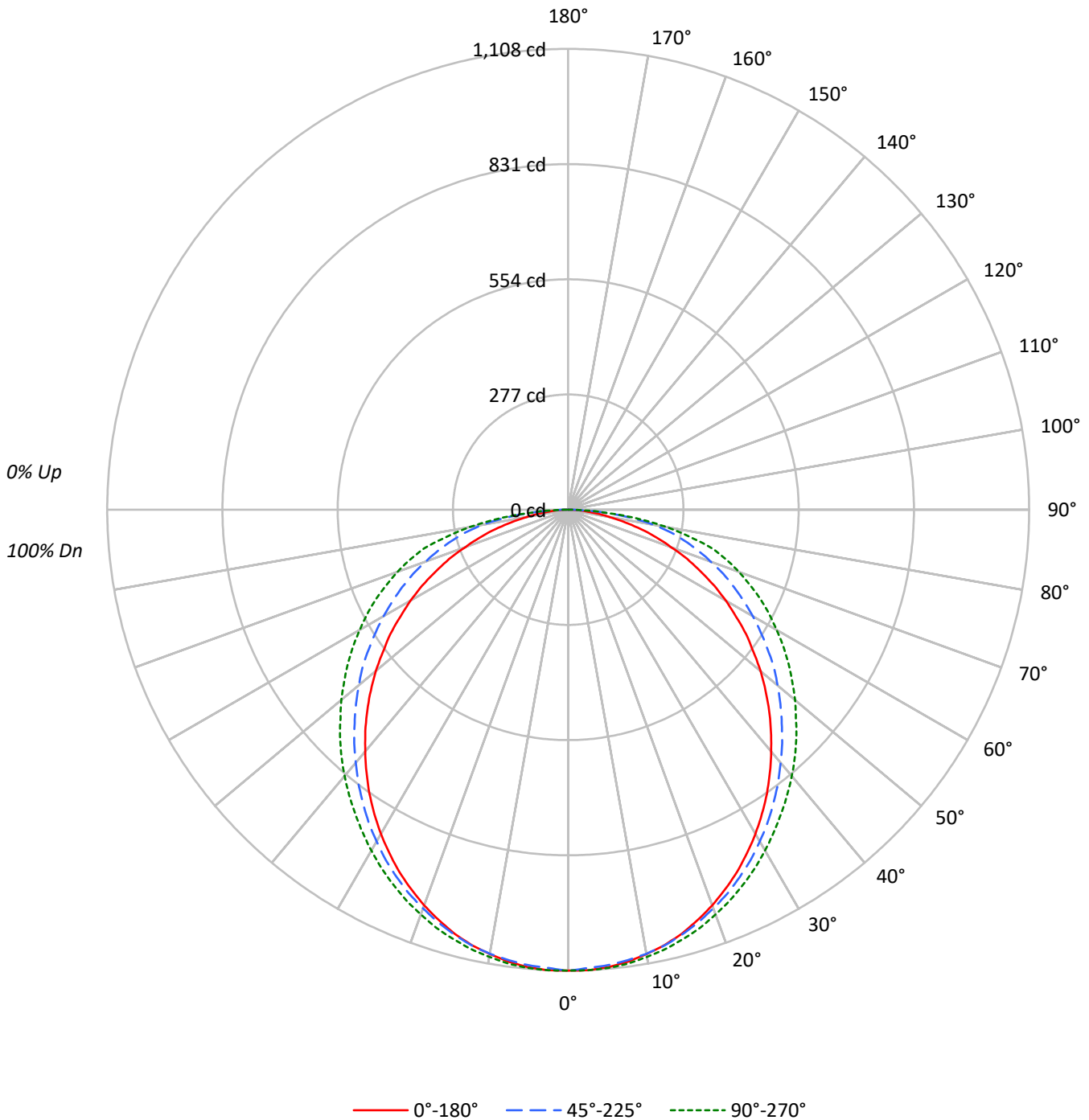
Input Watts (W): 32.156982
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1491	1491	1491
5°	1491	1485	1494
10°	1483	1481	1492
15°	1470	1473	1489
20°	1450	1461	1483
25°	1426	1447	1477
30°	1398	1431	1470
35°	1368	1413	1466
40°	1333	1395	1469
45°	1300	1381	1476
50°	1264	1374	1490
55°	1225	1372	1517
60°	1177	1379	1556
65°	1115	1400	1624
70°	1036	1434	1716
75°	945	1506	1861
80°	777	1622	1861
85°	596	1496	1599



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.8	3.2
10°-20°	299.2	9.1
20°-30°	450.3	13.6
30°-40°	539.6	16.3
40°-50°	562.4	17.0
50°-60°	523.2	15.9
60°-70°	430.9	13.1
70°-80°	293.5	8.9
80°-90°	96.9	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°	854.4	25.9
0°-40°	1394.0	42.2
0°-60°	2479.6	75.1
0°-90°	3300.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3300.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1108	1108	1108	1108	1108	
5°	1104	1104	1100	1105	1106	105
15°	1055	1056	1058	1068	1069	297
25°	961	965	975	992	995	442
35°	833	843	860	884	892	521
45°	683	697	726	762	776	527
55°	522	540	585	631	647	465
65°	350	380	440	491	510	348
75°	182	222	290	342	358	192
85°	39	75	97	104	104	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1108.3	1108.3	1108.3	1108.3	1108.3
2.5°	1108.3	1108.3	1102.8	1108.3	1108.3
5°	1103.9	1103.9	1099.5	1105.0	1106.1
7.5°	1096.1	1097.3	1092.8	1099.5	1100.6
10°	1085.1	1086.2	1084.0	1090.6	1091.7
12.5°	1071.9	1073.0	1073.0	1080.7	1081.8
15°	1055.4	1056.5	1057.6	1067.5	1068.6
17.5°	1034.5	1037.8	1040.0	1052.1	1054.3
20°	1012.4	1015.7	1020.1	1033.4	1035.6
22.5°	987.1	991.5	999.2	1013.5	1016.8
25°	960.6	965.1	975.0	991.5	994.8
27.5°	930.9	937.5	949.6	967.3	971.7
30°	900.1	906.7	921.0	939.7	946.3
32.5°	867.0	875.8	892.3	913.3	919.9
35°	832.9	842.8	860.4	883.5	892.3
37.5°	796.5	807.5	828.4	853.8	864.8
40°	759.0	772.3	794.3	824.0	836.2
42.5°	721.6	733.7	761.2	793.2	806.4
45°	683.0	697.3	726.0	762.3	775.6
47.5°	643.4	657.7	691.8	730.4	742.5
50°	603.7	618.0	656.6	697.3	711.7
52.5°	560.7	579.5	623.5	664.3	678.6
55°	522.2	539.8	585.0	631.2	646.7
57.5°	478.1	499.1	548.6	597.1	613.6
60°	437.4	459.4	512.3	561.8	578.4
62.5°	395.5	419.7	475.9	526.6	545.3
65°	350.3	380.1	439.6	491.3	510.1
67.5°	309.6	340.4	403.2	456.1	472.6
70°	263.3	300.8	364.6	417.5	436.3
72.5°	223.6	261.1	328.3	380.1	398.8
75°	181.8	222.5	289.7	341.5	358.0
77.5°	139.9	185.1	252.3	291.9	297.4
80°	100.3	147.6	209.3	232.4	240.2
82.5°	70.5	113.5	154.2	169.7	174.1
85°	38.6	74.9	96.9	103.6	103.6
87.5°	16.5	31.9	38.6	39.7	40.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)