

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: P275959

Luminaire Tested: **24CZ2-45-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P275959
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: 24CZ2-45-UNV-L83050-W2A1-U-4000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4502.0 lumens
Efficiency: N/A
Efficacy: 125.7 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

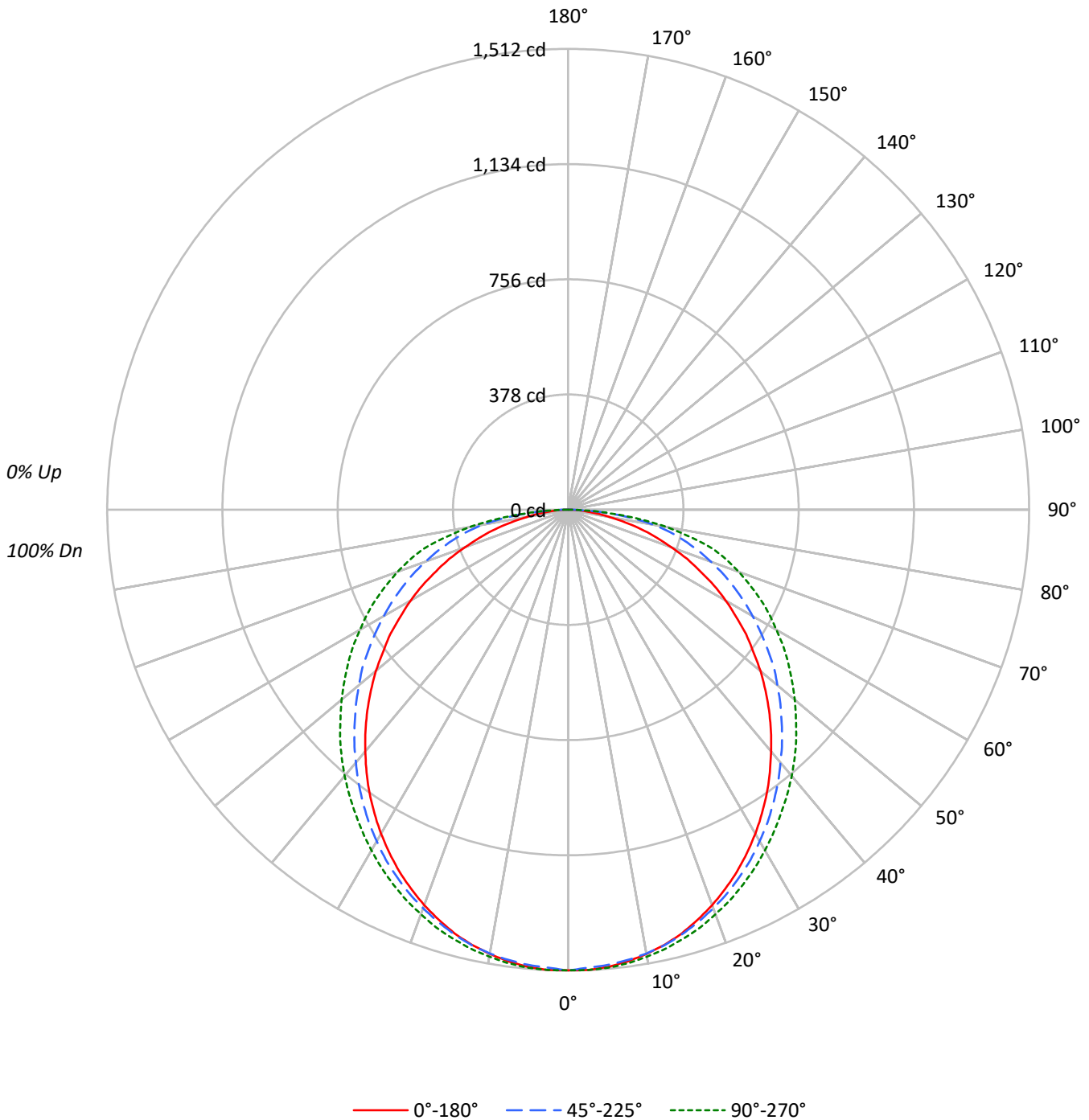
Input Watts (W): 35.805
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2034	2034	2034
5°	2033	2025	2037
10°	2022	2020	2034
15°	2005	2009	2030
20°	1977	1992	2022
25°	1945	1974	2014
30°	1907	1952	2005
35°	1866	1928	1999
40°	1818	1903	2003
45°	1773	1884	2013
50°	1724	1874	2032
55°	1671	1871	2069
60°	1605	1880	2123
65°	1521	1909	2215
70°	1413	1956	2341
75°	1289	2054	2538
80°	1059	2212	2538
85°	812	2041	2180



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.0	3.2
10°-20°	408.1	9.1
20°-30°	614.2	13.6
30°-40°	736.0	16.3
40°-50°	767.0	17.0
50°-60°	713.6	15.9
60°-70°	587.7	13.1
70°-80°	400.3	8.9
80°-90°	132.2	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°	1165.2	25.9
0°-40°	1901.2	42.2
0°-60°	3381.8	75.1
0°-90°	4502.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4502.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1512	1512	1512	1512	1512	
5°	1506	1506	1500	1507	1508	143
15°	1439	1441	1442	1456	1457	406
25°	1310	1316	1330	1352	1357	603
35°	1136	1149	1174	1205	1217	710
45°	932	951	990	1040	1058	718
55°	712	736	798	861	882	635
65°	478	518	600	670	696	474
75°	248	304	395	466	488	261
85°	53	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°	1511.5	1511.5	1511.5	1511.5	1511.5
2.5°	1511.5	1511.5	1504.0	1511.5	1511.5
5°	1505.5	1505.5	1499.5	1507.0	1508.5
7.5°	1495.0	1496.5	1490.5	1499.5	1501.0
10°	1480.0	1481.5	1478.5	1487.5	1489.0
12.5°	1461.9	1463.5	1463.5	1474.0	1475.5
15°	1439.4	1440.9	1442.4	1455.9	1457.4
17.5°	1410.9	1415.4	1418.4	1434.9	1437.9
20°	1380.8	1385.3	1391.3	1409.4	1412.4
22.5°	1346.3	1352.3	1362.8	1382.3	1386.8
25°	1310.2	1316.2	1329.7	1352.3	1356.8
27.5°	1269.6	1278.6	1295.2	1319.2	1325.2
30°	1227.6	1236.6	1256.1	1281.6	1290.7
32.5°	1182.5	1194.5	1217.0	1245.6	1254.6
35°	1135.9	1149.4	1173.5	1205.0	1217.0
37.5°	1086.3	1101.3	1129.9	1164.4	1179.5
40°	1035.2	1053.3	1083.3	1123.9	1140.4
42.5°	984.1	1000.7	1038.2	1081.8	1099.8
45°	931.6	951.1	990.2	1039.7	1057.8
47.5°	877.5	897.0	943.6	996.2	1012.7
50°	823.4	842.9	895.5	951.1	970.6
52.5°	764.8	790.3	850.4	906.0	925.5
55°	712.2	736.2	797.8	860.9	882.0
57.5°	652.1	680.6	748.3	814.4	836.9
60°	596.5	626.5	698.7	766.3	788.8
62.5°	539.4	572.5	649.1	718.2	743.7
65°	477.8	518.4	599.5	670.1	695.7
67.5°	422.2	464.3	549.9	622.0	644.6
70°	359.1	410.2	497.3	569.5	595.0
72.5°	305.0	356.1	447.7	518.4	543.9
75°	247.9	303.5	395.2	465.8	488.3
77.5°	190.8	252.4	344.1	398.2	405.7
80°	136.7	201.3	285.5	317.0	327.5
82.5°	96.2	154.8	210.4	231.4	237.4
85°	52.6	102.2	132.2	141.2	141.2
87.5°	22.5	43.6	52.6	54.1	55.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)