

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: P275993

Luminaire Tested: **24CZ2-55HE-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P275993
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: 24CZ2-55HE-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: 4462.8 lumens
Efficiency: N/A
Efficacy: 109.3 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

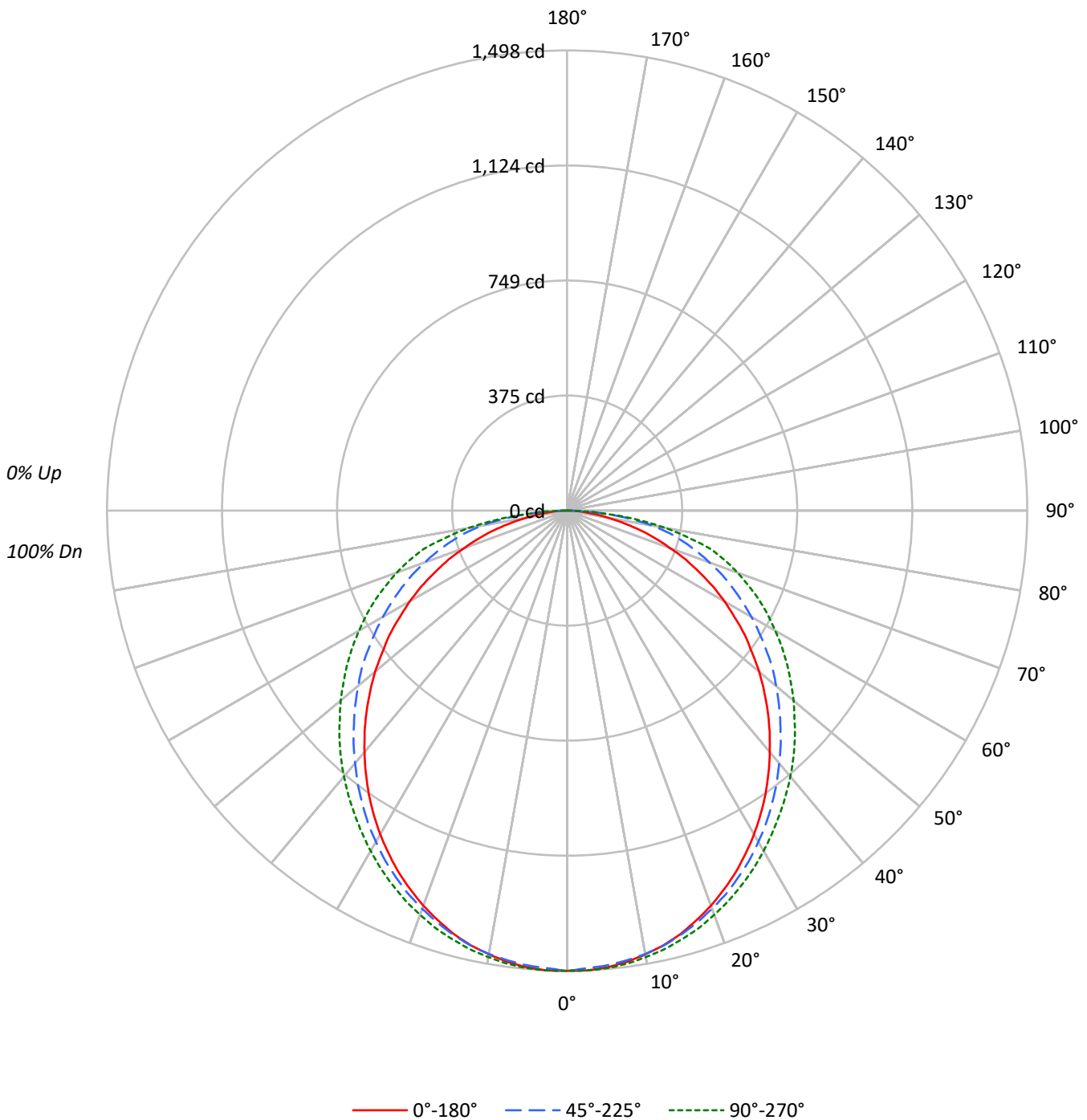
Input Watts (W): 40.844577
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2016	2016	2016
5°	2016	2008	2020
10°	2004	2002	2017
15°	1988	1992	2012
20°	1960	1975	2005
25°	1928	1957	1997
30°	1891	1935	1988
35°	1849	1911	1982
40°	1802	1886	1986
45°	1757	1868	1995
50°	1708	1858	2014
55°	1656	1855	2051
60°	1591	1864	2104
65°	1508	1892	2195
70°	1400	1939	2320
75°	1278	2036	2517
80°	1050	2193	2516
85°	804	2024	2161



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.7	3.2
10°-20°	404.6	9.1
20°-30°	608.8	13.6
30°-40°	729.6	16.3
40°-50°	760.3	17.0
50°-60°	707.4	15.9
60°-70°	582.6	13.1
70°-80°	396.8	8.9
80°-90°	131.0	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°	1155.1	25.9
0°-40°	1884.7	42.2
0°-60°	3352.4	75.1
0°-90°	4462.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4462.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1498	1498	1498	1498	1498	
5°	1492	1492	1486	1494	1495	142
15°	1427	1428	1430	1443	1445	402
25°	1299	1305	1318	1340	1345	598
35°	1126	1139	1163	1194	1206	704
45°	923	943	982	1031	1049	712
55°	706	730	791	853	874	629
65°	474	514	594	664	690	470
75°	246	301	392	462	484	259
85°	52	101	131	140	140	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1498.4	1498.4	1498.4	1498.4	1498.4
2.5°	1498.4	1498.4	1490.9	1498.4	1498.4
5°	1492.4	1492.4	1486.4	1493.9	1495.4
7.5°	1482.0	1483.5	1477.5	1486.4	1487.9
10°	1467.1	1468.6	1465.6	1474.5	1476.0
12.5°	1449.2	1450.7	1450.7	1461.1	1462.6
15°	1426.9	1428.4	1429.8	1443.2	1444.7
17.5°	1398.6	1403.0	1406.0	1422.4	1425.4
20°	1368.8	1373.2	1379.2	1397.1	1400.1
22.5°	1334.5	1340.5	1350.9	1370.3	1374.7
25°	1298.8	1304.7	1318.1	1340.5	1344.9
27.5°	1258.6	1267.5	1283.9	1307.7	1313.7
30°	1216.9	1225.8	1245.2	1270.5	1279.4
32.5°	1172.2	1184.1	1206.4	1234.7	1243.7
35°	1126.0	1139.4	1163.2	1194.5	1206.4
37.5°	1076.8	1091.7	1120.0	1154.3	1169.2
40°	1026.2	1044.1	1073.9	1114.1	1130.5
42.5°	975.6	992.0	1029.2	1072.4	1090.3
45°	923.4	942.8	981.5	1030.7	1048.6
47.5°	869.8	889.2	935.4	987.5	1003.9
50°	816.2	835.6	887.7	942.8	962.2
52.5°	758.1	783.4	843.0	898.1	917.5
55°	706.0	729.8	790.9	853.4	874.3
57.5°	646.4	674.7	741.7	807.3	829.6
60°	591.3	621.1	692.6	759.6	781.9
62.5°	534.7	567.5	643.4	711.9	737.3
65°	473.6	513.8	594.3	664.3	689.6
67.5°	418.5	460.2	545.1	616.6	639.0
70°	356.0	406.6	493.0	564.5	589.8
72.5°	302.4	353.0	443.8	513.8	539.2
75°	245.8	300.9	391.7	461.7	484.1
77.5°	189.2	250.2	341.1	394.7	402.1
80°	135.5	199.6	283.0	314.3	324.7
82.5°	95.3	153.4	208.5	229.4	235.3
85°	52.1	101.3	131.1	140.0	140.0
87.5°	22.3	43.2	52.1	53.6	55.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)