

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: P260653

Luminaire Tested: **24CZ-LD5-55-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260653
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25697)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-55-UNV-L93050-W2A1-U-3500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED AT 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4717.5 lumens
Efficiency: N/A
Efficacy: 115.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

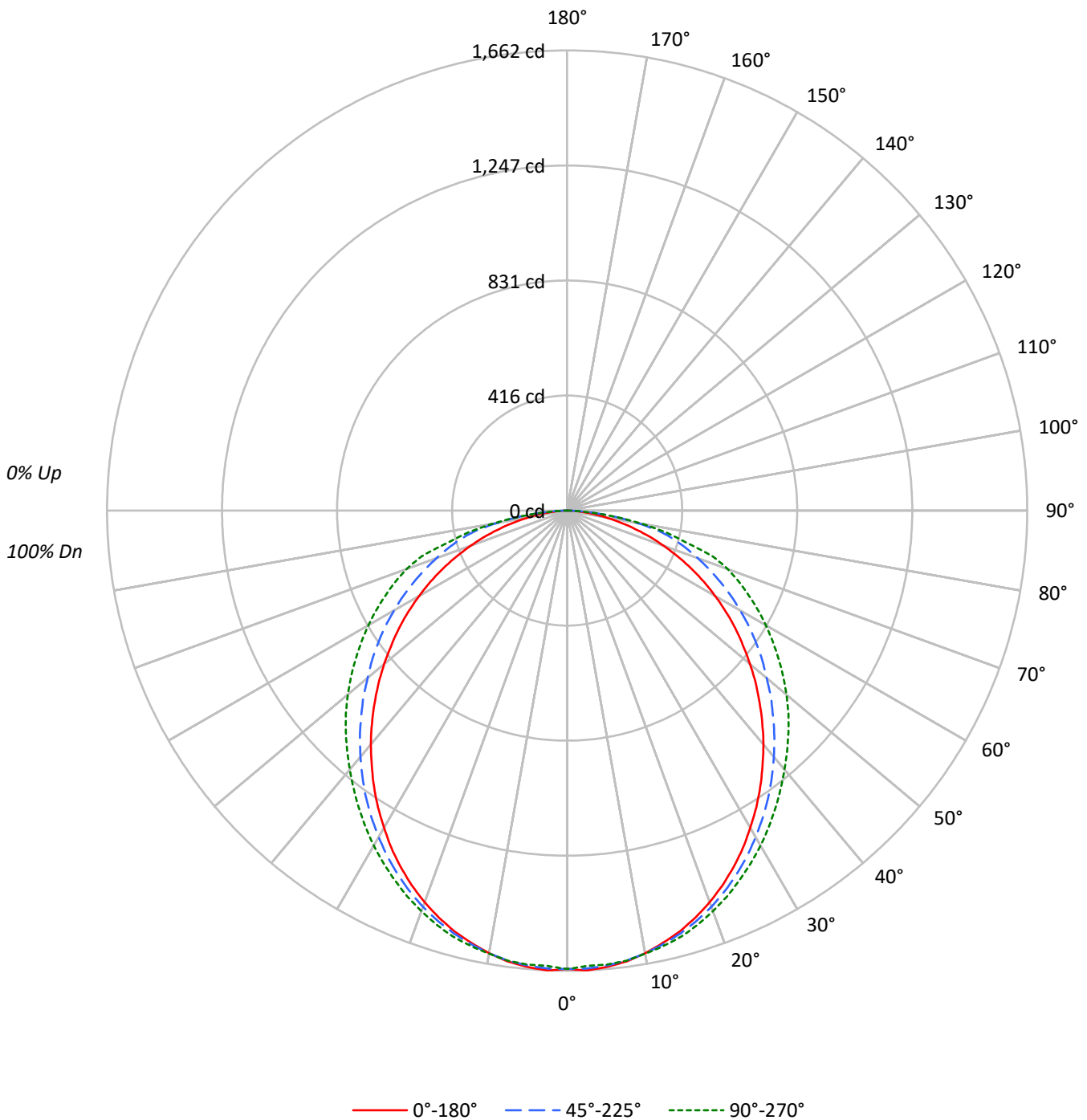
Input Watts (W): 40.844577
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2228	2228	2228
5°	2234	2227	2223
10°	2218	2218	2220
15°	2191	2203	2218
20°	2155	2181	2204
25°	2110	2151	2187
30°	2055	2115	2171
35°	1998	2080	2154
40°	1938	2040	2145
45°	1872	2001	2152
50°	1805	1968	2164
55°	1739	1955	2186
60°	1660	1943	2230
65°	1574	1944	2304
70°	1455	1976	2427
75°	1302	2065	2309
80°	1089	1977	2115
85°	823	1521	1447



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.4	3.3
10°-20°	445.3	9.4
20°-30°	665.7	14.1
30°-40°	789.7	16.7
40°-50°	812.8	17.2
50°-60°	745.6	15.8
60°-70°	602.9	12.8
70°-80°	391.3	8.3
80°-90°	107.9	2.3
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°	1267.4	26.9
0°-40°	2057.1	43.6
0°-60°	3615.5	76.6
0°-90°	4717.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4717.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1656	1656	1656	1656	1656	
5°	1654	1643	1649	1648	1646	157
15°	1573	1567	1581	1588	1593	443
25°	1421	1423	1449	1462	1473	654
35°	1216	1226	1266	1294	1312	761
45°	984	1000	1052	1102	1131	759
55°	741	764	834	901	932	662
65°	494	523	611	691	724	488
75°	250	297	397	444	444	266
85°	53	90	98	95	94	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1655.6	1655.6	1655.6	1655.6	1655.6
2.5°	1662.1	1649.1	1655.6	1654.0	1645.9
5°	1654.0	1642.7	1649.1	1647.5	1645.9
7.5°	1642.7	1631.4	1639.4	1637.8	1639.4
10°	1623.3	1613.6	1623.3	1624.9	1624.9
12.5°	1599.1	1591.0	1603.9	1607.1	1610.4
15°	1573.2	1566.8	1581.3	1587.8	1592.6
17.5°	1540.9	1536.1	1553.8	1561.9	1568.4
20°	1505.4	1503.8	1523.1	1531.2	1539.3
22.5°	1465.0	1465.0	1487.6	1497.3	1508.6
25°	1421.4	1423.0	1448.8	1461.8	1473.1
27.5°	1374.5	1376.2	1406.9	1423.0	1435.9
30°	1322.9	1329.3	1361.6	1382.6	1397.2
32.5°	1271.2	1279.3	1314.8	1339.0	1355.2
35°	1216.3	1225.9	1266.3	1293.8	1311.6
37.5°	1159.7	1171.0	1214.6	1245.3	1266.3
40°	1103.2	1116.1	1161.3	1196.9	1221.1
42.5°	1043.4	1058.0	1108.0	1150.0	1175.9
45°	983.7	999.8	1051.5	1101.6	1130.7
47.5°	923.9	943.3	998.2	1053.1	1083.8
50°	862.5	881.9	940.1	1003.0	1033.7
52.5°	801.1	823.8	888.4	953.0	983.7
55°	741.4	764.0	833.5	901.3	932.0
57.5°	680.0	702.6	778.5	849.6	880.3
60°	617.0	642.9	722.0	794.7	828.6
62.5°	555.6	583.1	667.1	744.6	776.9
65°	494.3	523.3	610.6	691.3	723.6
67.5°	431.3	465.2	555.6	638.0	671.9
70°	369.9	407.0	502.3	584.7	617.0
72.5°	310.1	350.5	449.0	533.0	552.4
75°	250.4	297.2	397.3	444.2	444.2
77.5°	193.8	245.5	339.2	357.0	366.7
80°	140.5	197.1	255.2	276.2	273.0
82.5°	93.7	150.2	182.5	182.5	177.7
85°	53.3	90.5	98.5	95.3	93.7
87.5°	22.6	33.9	30.7	24.2	21.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)