

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: P230018

Luminaire Tested: **24CZ-LD5-55SE-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230018
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-LD5-55SE-UNV-L940-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH RIBBED LENS
Light Source: (84) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4889.0 lumens
Efficiency: N/A
Efficacy: 89.4 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

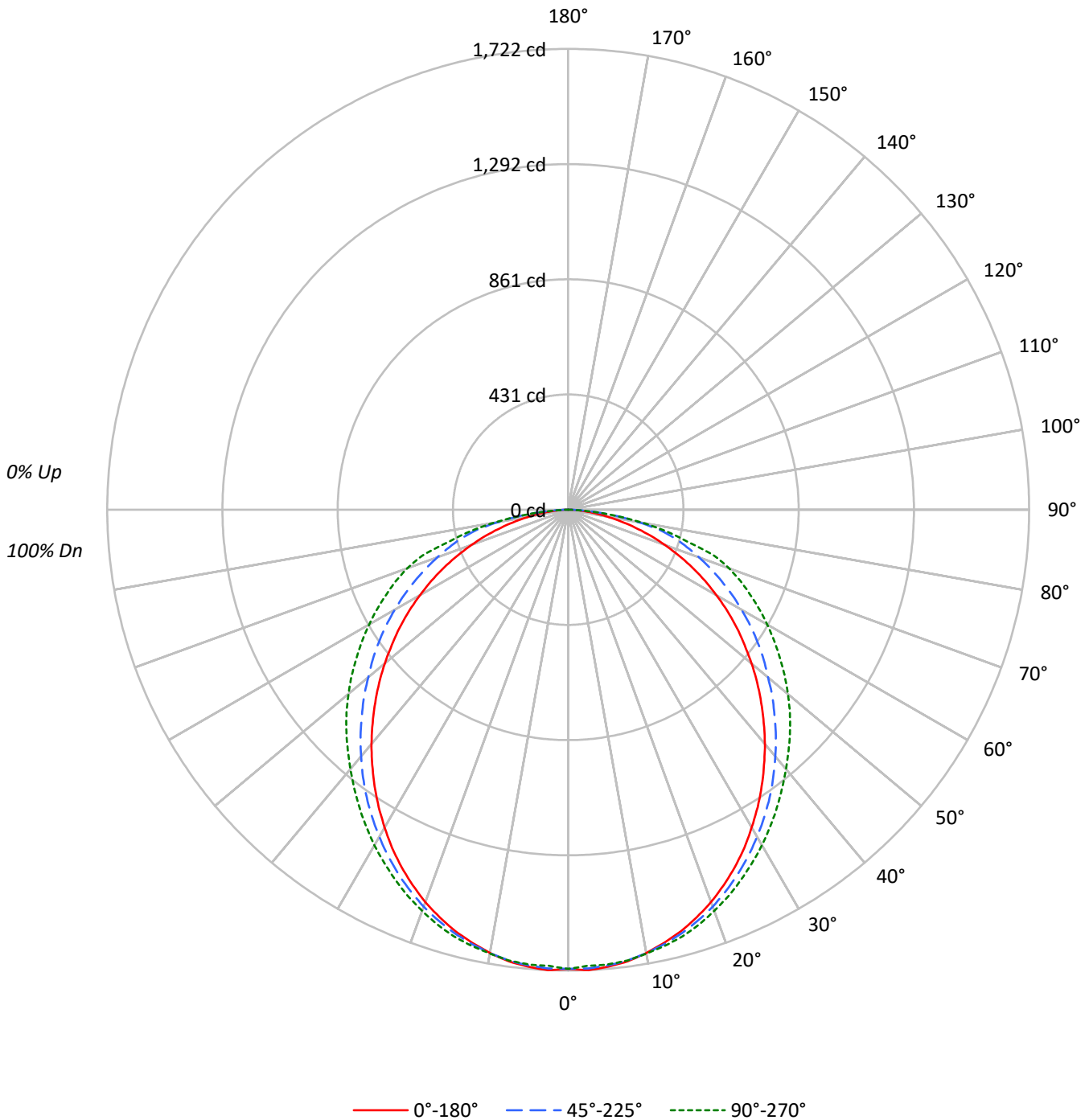
Input Watts (W): 54.69
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2309	2309	2309
5°	2315	2308	2304
10°	2298	2298	2301
15°	2271	2283	2299
20°	2234	2260	2284
25°	2187	2229	2266
30°	2130	2192	2250
35°	2070	2156	2233
40°	2008	2114	2223
45°	1940	2073	2230
50°	1871	2039	2242
55°	1802	2026	2266
60°	1721	2013	2311
65°	1631	2014	2387
70°	1508	2048	2515
75°	1349	2141	2393
80°	1128	2049	2192
85°	852	1576	1499



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.1	3.3
10°-20°	461.5	9.4
20°-30°	689.9	14.1
30°-40°	818.4	16.7
40°-50°	842.3	17.2
50°-60°	772.7	15.8
60°-70°	624.8	12.8
70°-80°	405.5	8.3
80°-90°	111.8	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°	1313.4	26.9
0°-40°	2131.8	43.6
0°-60°	3746.9	76.6
0°-90°	4889.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4889.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1716	1716	1716	1716	1716	
5°	1714	1702	1709	1707	1706	163
15°	1630	1624	1639	1646	1650	459
25°	1473	1475	1502	1515	1527	678
35°	1260	1270	1312	1341	1359	788
45°	1019	1036	1090	1142	1172	787
55°	768	792	864	934	966	686
65°	512	542	633	716	750	506
75°	260	308	412	460	460	276
85°	55	94	102	99	97	68
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1715.8	1715.8	1715.8	1715.8	1715.8
2.5°	1722.5	1709.1	1715.8	1714.1	1705.7
5°	1714.1	1702.4	1709.1	1707.4	1705.7
7.5°	1702.4	1690.7	1699.0	1697.4	1699.0
10°	1682.3	1672.3	1682.3	1684.0	1684.0
12.5°	1657.2	1648.8	1662.2	1665.6	1668.9
15°	1630.4	1623.7	1638.8	1645.5	1650.5
17.5°	1596.9	1591.9	1610.3	1618.7	1625.4
20°	1560.1	1558.4	1578.5	1586.9	1595.3
22.5°	1518.3	1518.3	1541.7	1551.7	1563.5
25°	1473.1	1474.7	1501.5	1514.9	1526.6
27.5°	1424.5	1426.2	1458.0	1474.7	1488.1
30°	1371.0	1377.6	1411.1	1432.9	1448.0
32.5°	1317.4	1325.8	1362.6	1387.7	1404.4
35°	1260.5	1270.5	1312.4	1340.8	1359.2
37.5°	1201.9	1213.6	1258.8	1290.6	1312.4
40°	1143.3	1156.7	1203.6	1240.4	1265.5
42.5°	1081.4	1096.4	1148.3	1191.8	1218.6
45°	1019.4	1036.2	1089.7	1141.6	1171.8
47.5°	957.5	977.6	1034.5	1091.4	1123.2
50°	893.9	914.0	974.2	1039.5	1071.3
52.5°	830.3	853.7	920.7	987.6	1019.4
55°	768.3	791.8	863.8	934.1	965.9
57.5°	704.7	728.2	806.8	880.5	912.3
60°	639.4	666.2	748.2	823.6	858.7
62.5°	575.8	604.3	691.3	771.7	805.2
65°	512.2	542.4	632.7	716.4	749.9
67.5°	446.9	482.1	575.8	661.2	696.4
70°	383.3	421.8	520.6	606.0	639.4
72.5°	321.4	363.2	465.4	552.4	572.5
75°	259.5	308.0	411.8	460.3	460.3
77.5°	200.9	254.4	351.5	369.9	380.0
80°	145.6	204.2	264.5	286.2	282.9
82.5°	97.1	155.7	189.2	189.2	184.1
85°	55.2	93.7	102.1	98.8	97.1
87.5°	23.4	35.2	31.8	25.1	21.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)