

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: P263190

Luminaire Tested: **24CZ-LD5-70-SQP-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P263190
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25695)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-70-SQP-UNV-L93050-W2A1-U-4500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS
Light Source: (336) 90 CRI LEDS TUNED AT 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4359.7 lumens
Efficiency: N/A
Efficacy: 78.0 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.42
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

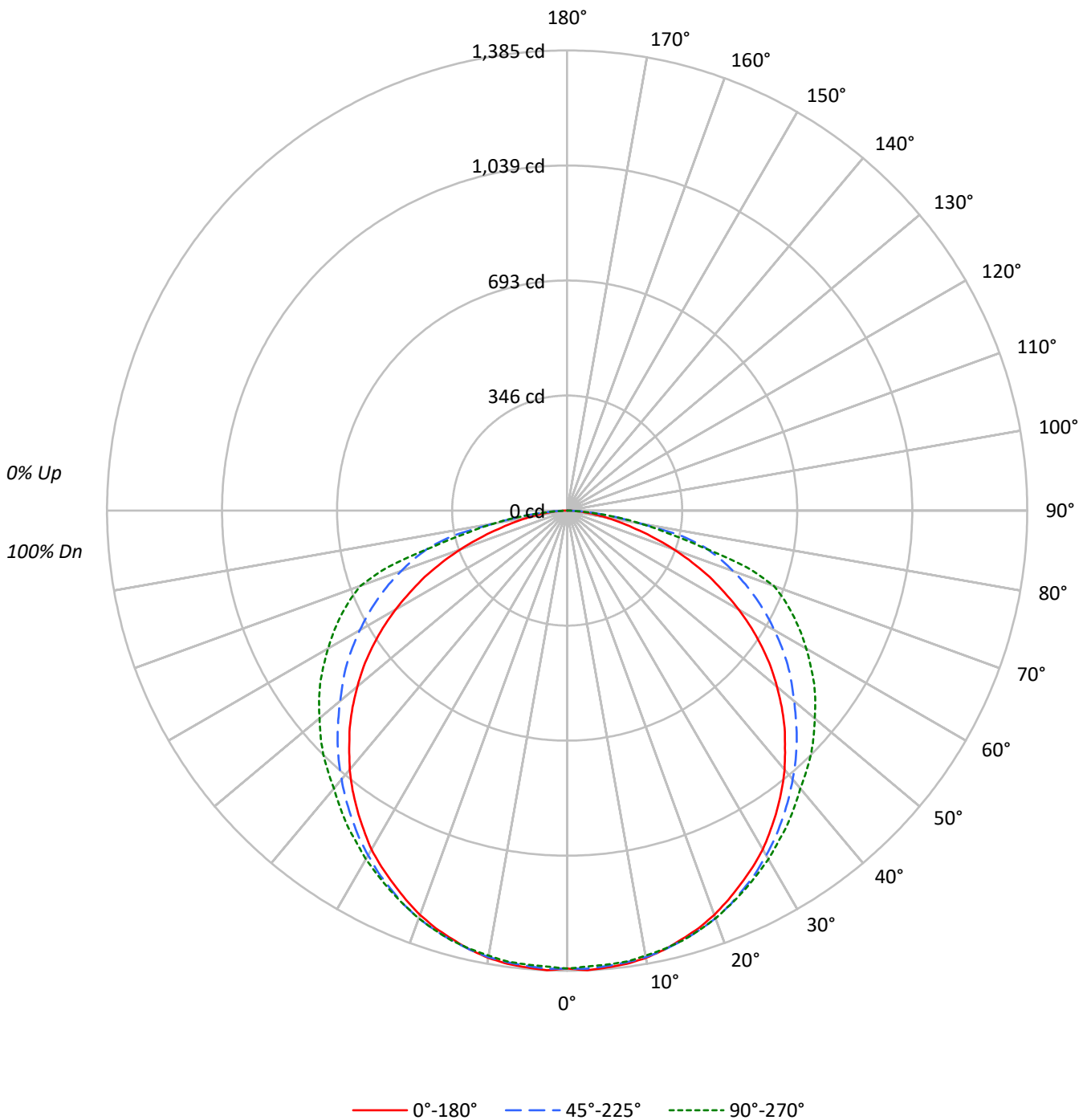
Input Watts (W): 55.914762
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	97	93	96	93	90	92	90	87	89	87	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	60	70	64	59	67	63	58	56
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1854	1854	1854
5°	1864	1858	1852
10°	1868	1865	1858
15°	1860	1866	1866
20°	1854	1870	1870
25°	1839	1866	1872
30°	1830	1861	1882
35°	1809	1857	1897
40°	1788	1855	1918
45°	1761	1860	1975
50°	1725	1867	2036
55°	1680	1902	2129
60°	1606	1939	2236
65°	1506	2000	2394
70°	1347	2091	2605
75°	1112	2236	2154
80°	907	1727	1745
85°	730	1147	1078



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.9	3.0
10°-20°	377.7	8.7
20°-30°	577.3	13.2
30°-40°	706.0	16.2
40°-50°	755.4	17.3
50°-60°	723.4	16.6
60°-70°	611.9	14.0
70°-80°	387.9	8.9
80°-90°	89.2	2.0
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°	1085.8	24.9
0°-40°	1791.9	41.1
0°-60°	3270.7	75.0
0°-90°	4359.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4359.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1378	1378	1378	1378	1378	
5°	1380	1374	1376	1374	1371	131
15°	1335	1333	1340	1340	1340	377
25°	1239	1239	1257	1261	1261	571
35°	1101	1108	1130	1146	1155	689
45°	926	941	977	1018	1038	713
55°	716	739	811	878	908	639
65°	473	518	628	714	752	466
75°	214	302	430	428	414	233
85°	47	72	74	68	70	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1378.2	1378.2	1378.2	1378.2	1378.2
2.5°	1384.9	1378.2	1380.4	1378.2	1373.7
5°	1380.4	1373.7	1375.9	1373.7	1371.4
7.5°	1375.9	1369.2	1371.4	1369.2	1369.2
10°	1366.9	1360.2	1364.7	1362.4	1360.2
12.5°	1353.4	1348.9	1353.4	1351.2	1351.2
15°	1335.4	1333.1	1339.9	1339.9	1339.9
17.5°	1317.4	1315.1	1324.1	1324.1	1324.1
20°	1294.9	1292.6	1306.1	1306.1	1306.1
22.5°	1267.8	1265.6	1283.6	1283.6	1283.6
25°	1238.6	1238.6	1256.6	1261.1	1261.1
27.5°	1209.3	1209.3	1229.6	1236.3	1236.3
30°	1177.8	1177.8	1198.0	1207.0	1211.5
32.5°	1139.5	1144.0	1166.5	1177.8	1182.3
35°	1101.2	1107.9	1130.5	1146.2	1155.2
37.5°	1060.7	1067.4	1094.4	1112.5	1123.7
40°	1017.9	1026.9	1056.2	1078.7	1092.2
42.5°	970.6	984.1	1017.9	1047.1	1065.2
45°	925.5	941.3	977.3	1017.9	1038.1
47.5°	876.0	894.0	934.5	986.3	1006.6
50°	824.2	842.2	891.8	950.3	972.8
52.5°	772.4	792.7	851.2	914.3	941.3
55°	716.1	738.6	810.7	878.3	907.5
57.5°	657.6	684.6	765.7	837.7	869.2
60°	596.8	630.5	720.6	797.2	831.0
62.5°	533.7	574.2	675.6	756.6	792.7
65°	472.9	517.9	628.3	713.9	752.1
67.5°	407.6	463.9	581.0	673.3	709.4
70°	342.3	407.6	531.5	626.0	662.1
72.5°	277.0	355.8	481.9	567.5	567.5
75°	213.9	301.8	430.1	427.9	414.4
77.5°	162.1	252.2	353.6	301.8	304.0
80°	117.1	202.7	222.9	222.9	225.2
82.5°	78.8	155.4	144.1	141.9	146.4
85°	47.3	72.1	74.3	67.6	69.8
87.5°	22.5	24.8	20.3	13.5	13.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)