

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: P263116

Luminaire Tested: **24CZ-LD5-70-SQP-UNV-L83050-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P263116
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-L83050-W2A1-U-5000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS
Light Source: (336) 80 CRI LEDS TUNED AT 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4948.0 lumens
Efficiency: N/A
Efficacy: 87.9 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

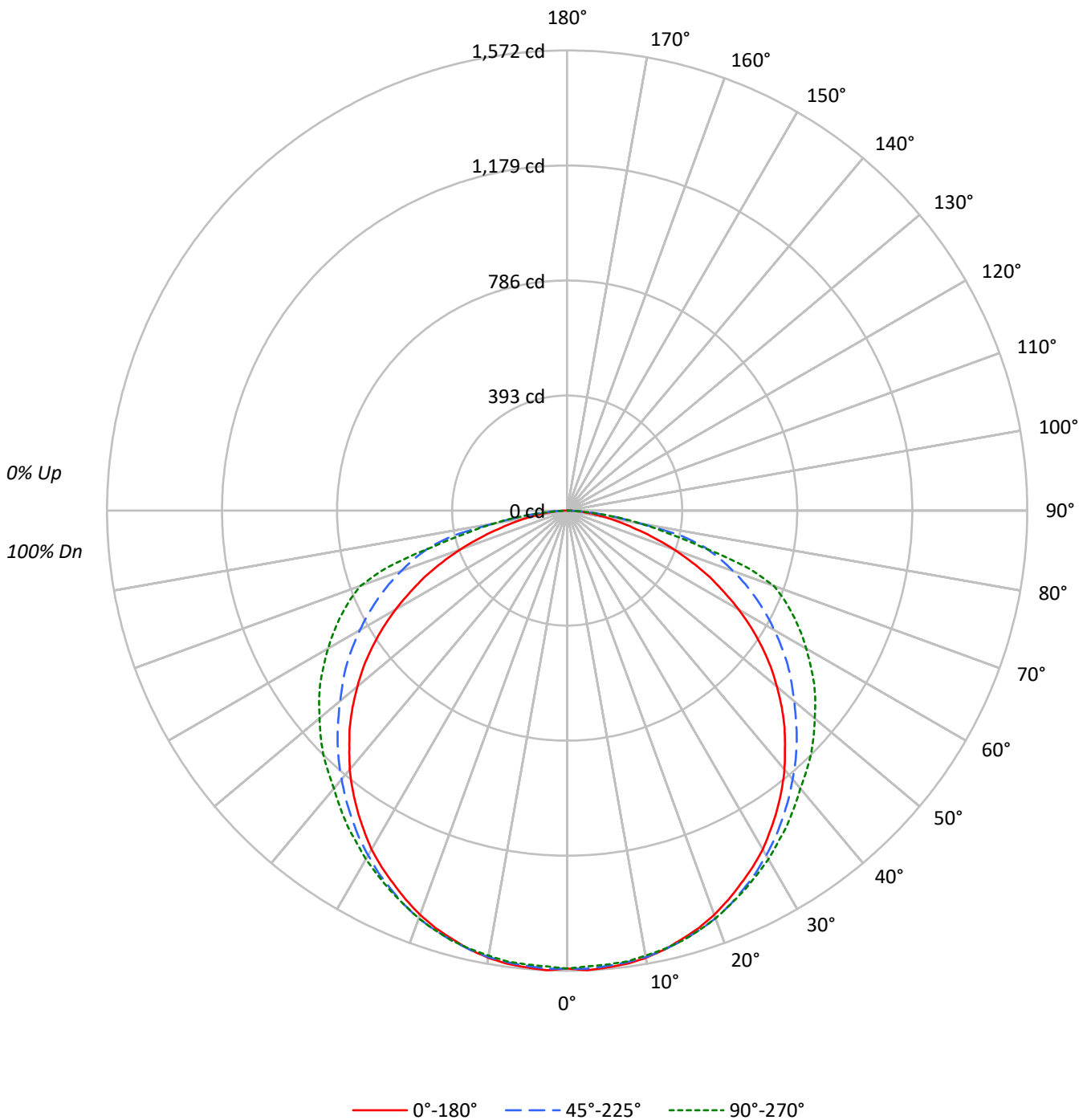
Input Watts (W): 56.290389
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P263116

CATALOG NUMBER: 24CZ-LD5-70-SQP-UNV-L83050-W2A1-U-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P263116

CATALOG NUMBER: 24CZ-LD5-70-SQP-UNV-L83050-W2A1-U-5000K

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°	2105	2105	2105
5°	2116	2109	2102
10°	2120	2116	2109
15°	2111	2118	2118
20°	2104	2123	2123
25°	2087	2117	2125
30°	2077	2112	2136
35°	2053	2107	2154
40°	2029	2105	2177
45°	1999	2111	2242
50°	1958	2119	2311
55°	1906	2158	2416
60°	1823	2201	2538
65°	1709	2270	2718
70°	1528	2373	2956
75°	1262	2538	2445
80°	1030	1960	1980
85°	829	1301	1223



TEST NUMBER: P263116

CATALOG NUMBER: 24CZ-LD5-70-SQP-UNV-L83050-W2A1-U-5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.6	3.0
10°-20°	428.7	8.7
20°-30°	655.2	13.2
30°-40°	801.3	16.2
40°-50°	857.4	17.3
50°-60°	821.0	16.6
60°-70°	694.5	14.0
70°-80°	440.2	8.9
80°-90°	101.3	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°	1232.4	24.9
0°-40°	2033.6	41.1
0°-60°	3712.0	75.0
0°-90°	4948.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4948.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1564	1564	1564	1564	1564	
5°	1567	1559	1562	1559	1556	149
15°	1516	1513	1521	1521	1521	428
25°	1406	1406	1426	1431	1431	649
35°	1250	1258	1283	1301	1311	782
45°	1050	1068	1109	1155	1178	809
55°	813	838	920	997	1030	725
65°	537	588	713	810	854	529
75°	243	342	488	486	470	264
85°	54	82	84	77	79	64
90°	0	0	0	0	0	



TEST NUMBER: P263116

CATALOG NUMBER: 24CZ-LD5-70-SQP-UNV-L83050-W2A1-U-5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1564.2	1564.2	1564.2	1564.2	1564.2
2.5°	1571.8	1564.2	1566.7	1564.2	1559.0
5°	1566.7	1559.0	1561.6	1559.0	1556.5
7.5°	1561.6	1553.9	1556.5	1553.9	1553.9
10°	1551.4	1543.7	1548.8	1546.3	1543.7
12.5°	1536.0	1530.9	1536.0	1533.5	1533.5
15°	1515.6	1513.0	1520.7	1520.7	1520.7
17.5°	1495.1	1492.6	1502.8	1502.8	1502.8
20°	1469.6	1467.0	1482.4	1482.4	1482.4
22.5°	1438.9	1436.4	1456.8	1456.8	1456.8
25°	1405.7	1405.7	1426.1	1431.3	1431.3
27.5°	1372.5	1372.5	1395.5	1403.1	1403.1
30°	1336.7	1336.7	1359.7	1369.9	1375.0
32.5°	1293.2	1298.4	1323.9	1336.7	1341.8
35°	1249.8	1257.5	1283.0	1300.9	1311.1
37.5°	1203.8	1211.5	1242.1	1262.6	1275.3
40°	1155.2	1165.4	1198.7	1224.2	1239.6
42.5°	1101.6	1116.9	1155.2	1188.5	1208.9
45°	1050.4	1068.3	1109.2	1155.2	1178.2
47.5°	994.2	1014.7	1060.7	1119.4	1142.4
50°	935.4	955.9	1012.1	1078.6	1104.1
52.5°	876.6	899.6	966.1	1037.7	1068.3
55°	812.7	838.3	920.1	996.8	1030.0
57.5°	746.3	777.0	869.0	950.8	986.5
60°	677.3	715.6	817.9	904.8	943.1
62.5°	605.7	651.7	766.7	858.8	899.6
65°	536.7	587.8	713.1	810.2	853.6
67.5°	462.6	526.5	659.4	764.2	805.1
70°	388.5	462.6	603.2	710.5	751.4
72.5°	314.4	403.8	546.9	644.1	644.1
75°	242.8	342.5	488.2	485.6	470.3
77.5°	184.0	286.3	401.3	342.5	345.0
80°	132.9	230.0	253.0	253.0	255.6
82.5°	89.5	176.4	163.6	161.0	166.1
85°	53.7	81.8	84.3	76.7	79.2
87.5°	25.6	28.1	23.0	15.3	15.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)