

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: P263108

Luminaire Tested: **24CZ-LD5-65-SQP-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263108  
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-LD5-65-SQP-UNV-L83050-W2A1-U-3500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4327.0 lumens  
Efficiency: N/A  
Efficacy: 88.5 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

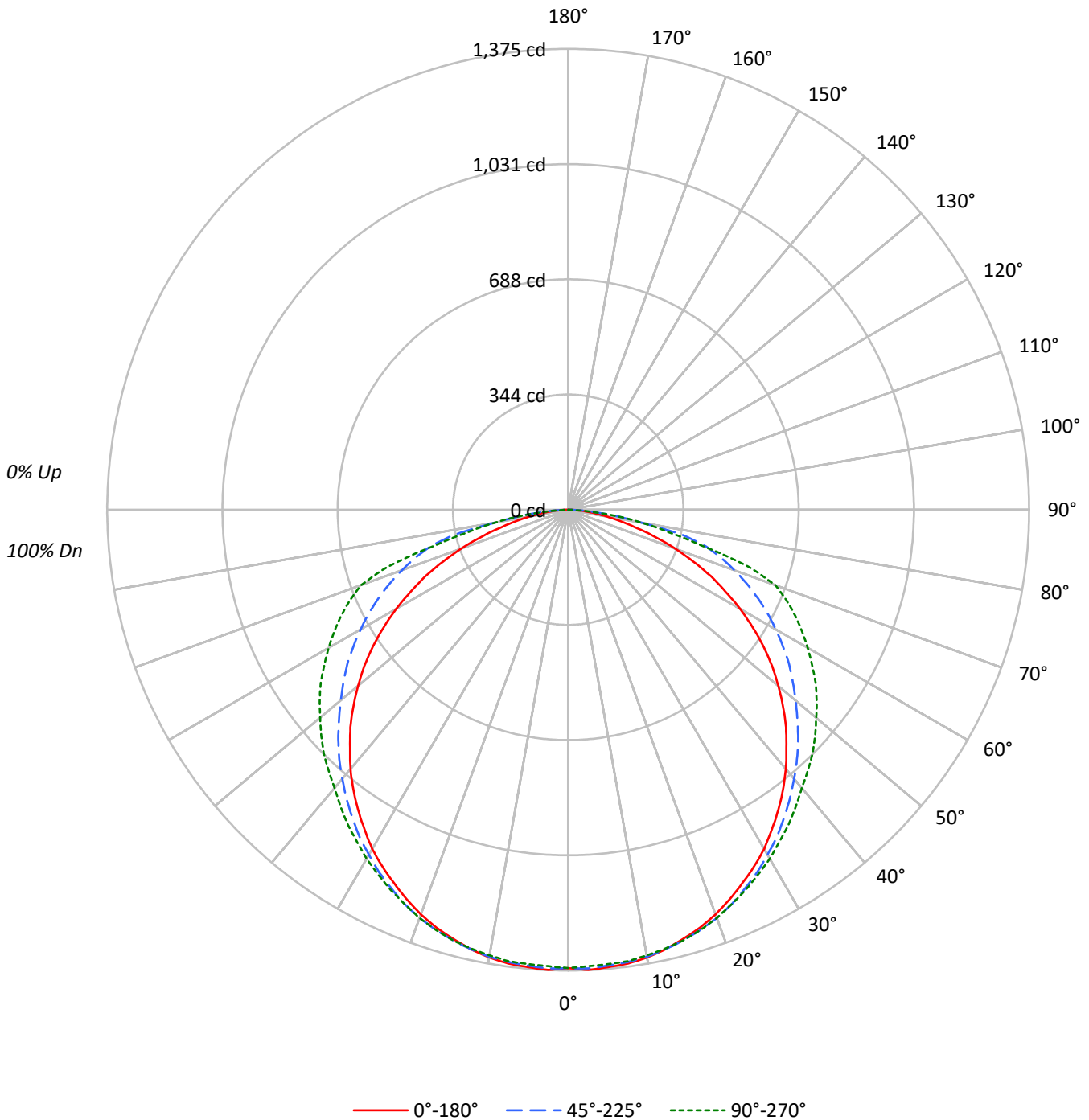
Input Watts (W): 48.918  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1840	1840	1840
5°	1850	1844	1838
10°	1854	1850	1844
15°	1846	1852	1852
20°	1840	1856	1856
25°	1825	1852	1858
30°	1816	1847	1868
35°	1795	1843	1883
40°	1774	1841	1904
45°	1748	1846	1961
50°	1712	1853	2021
55°	1667	1887	2113
60°	1594	1925	2219
65°	1494	1985	2377
70°	1336	2075	2585
75°	1104	2219	2138
80°	900	1715	1732
85°	724	1139	1070



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.9	3.0
10°-20°	374.9	8.7
20°-30°	572.9	13.2
30°-40°	700.7	16.2
40°-50°	749.7	17.3
50°-60°	717.9	16.6
60°-70°	607.3	14.0
70°-80°	385.0	8.9
80°-90°	88.6	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°	1077.7	24.9
0°-40°	1778.4	41.1
0°-60°	3246.1	75.0
0°-90°	4327.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4327.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1368	1368	1368	1368	1368	
5°	1370	1363	1366	1363	1361	130
15°	1325	1323	1330	1330	1330	374
25°	1229	1229	1247	1252	1252	567
35°	1093	1100	1122	1138	1147	684
45°	919	934	970	1010	1030	708
55°	711	733	805	872	901	634
65°	469	514	624	708	746	462
75°	212	300	427	425	411	231
85°	47	72	74	67	69	56
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1367.8	1367.8	1367.8	1367.8	1367.8
2.5°	1374.6	1367.8	1370.1	1367.8	1363.4
5°	1370.1	1363.4	1365.6	1363.4	1361.1
7.5°	1365.6	1358.9	1361.1	1358.9	1358.9
10°	1356.7	1350.0	1354.4	1352.2	1350.0
12.5°	1343.3	1338.8	1343.3	1341.0	1341.0
15°	1325.4	1323.1	1329.9	1329.9	1329.9
17.5°	1307.5	1305.3	1314.2	1314.2	1314.2
20°	1285.1	1282.9	1296.3	1296.3	1296.3
22.5°	1258.3	1256.1	1274.0	1274.0	1274.0
25°	1229.3	1229.3	1247.2	1251.6	1251.6
27.5°	1200.2	1200.2	1220.3	1227.0	1227.0
30°	1168.9	1168.9	1189.0	1198.0	1202.5
32.5°	1130.9	1135.4	1157.8	1168.9	1173.4
35°	1092.9	1099.6	1122.0	1137.6	1146.6
37.5°	1052.7	1059.4	1086.2	1104.1	1115.3
40°	1010.2	1019.2	1048.2	1070.6	1084.0
42.5°	963.3	976.7	1010.2	1039.3	1057.2
45°	918.6	934.2	970.0	1010.2	1030.4
47.5°	869.4	887.3	927.5	978.9	999.1
50°	818.0	835.9	885.1	943.2	965.5
52.5°	766.6	786.7	844.8	907.4	934.2
55°	710.7	733.1	804.6	871.7	900.7
57.5°	652.6	679.5	759.9	831.4	862.7
60°	592.3	625.8	715.2	791.2	824.7
62.5°	529.7	569.9	670.5	751.0	786.7
65°	469.4	514.1	623.6	708.5	746.5
67.5°	404.5	460.4	576.6	668.3	704.0
70°	339.7	404.5	527.5	621.3	657.1
72.5°	274.9	353.1	478.3	563.2	563.2
75°	212.3	299.5	426.9	424.7	411.2
77.5°	160.9	250.3	350.9	299.5	301.7
80°	116.2	201.2	221.3	221.3	223.5
82.5°	78.2	154.2	143.0	140.8	145.3
85°	46.9	71.5	73.8	67.1	69.3
87.5°	22.4	24.6	20.1	13.4	13.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)