

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: P263109

Luminaire Tested: **24CZ-LD5-65-SQP-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263109  
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-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4543.0 lumens  
Efficiency: N/A  
Efficacy: 90.8 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

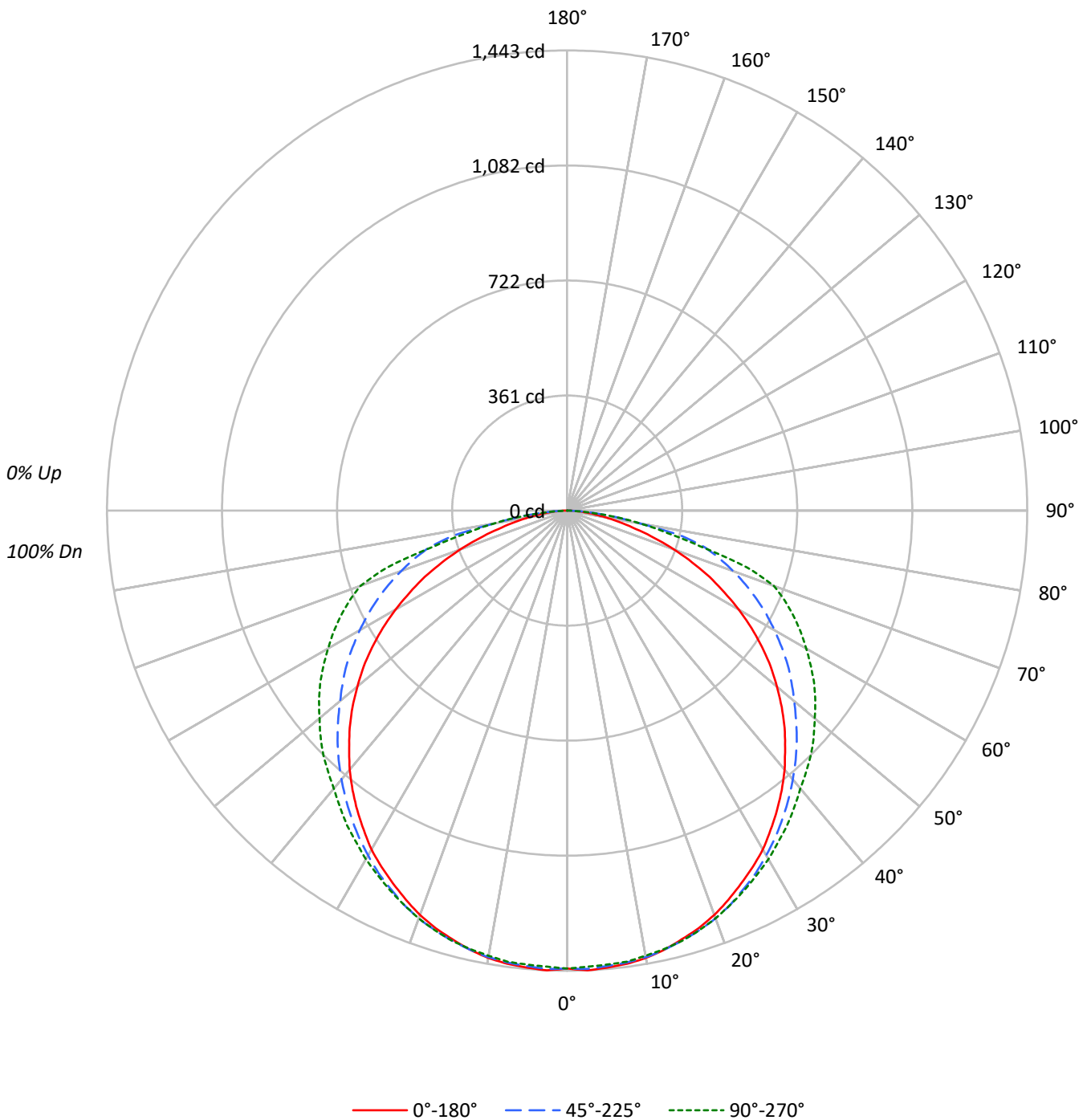
Input Watts (W): 50.043114  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1932	1932	1932
5°	1943	1937	1930
10°	1946	1943	1937
15°	1938	1945	1945
20°	1932	1949	1949
25°	1916	1944	1951
30°	1907	1940	1961
35°	1885	1935	1977
40°	1863	1933	1999
45°	1835	1938	2058
50°	1798	1945	2122
55°	1750	1982	2218
60°	1674	2021	2330
65°	1569	2084	2495
70°	1403	2179	2714
75°	1159	2330	2245
80°	945	1800	1819
85°	761	1195	1122



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.4	3.0
10°-20°	393.6	8.7
20°-30°	601.5	13.2
30°-40°	735.7	16.2
40°-50°	787.2	17.3
50°-60°	753.8	16.6
60°-70°	637.7	14.0
70°-80°	404.2	8.9
80°-90°	93.0	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°	1131.5	24.9
0°-40°	1867.2	41.1
0°-60°	3408.2	75.0
0°-90°	4543.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4543.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1436	1436	1436	1436	1436	
5°	1438	1431	1434	1431	1429	137
15°	1392	1389	1396	1396	1396	393
25°	1291	1291	1309	1314	1314	595
35°	1148	1154	1178	1194	1204	718
45°	964	981	1018	1061	1082	743
55°	746	770	845	915	946	666
65°	493	540	655	744	784	485
75°	223	314	448	446	432	242
85°	49	75	77	70	73	59
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1436.1	1436.1	1436.1	1436.1	1436.1
2.5°	1443.2	1436.1	1438.5	1436.1	1431.4
5°	1438.5	1431.4	1433.8	1431.4	1429.1
7.5°	1433.8	1426.7	1429.1	1426.7	1426.7
10°	1424.4	1417.4	1422.0	1419.7	1417.4
12.5°	1410.3	1405.6	1410.3	1408.0	1408.0
15°	1391.5	1389.2	1396.2	1396.2	1396.2
17.5°	1372.8	1370.4	1379.8	1379.8	1379.8
20°	1349.3	1347.0	1361.0	1361.0	1361.0
22.5°	1321.1	1318.8	1337.6	1337.6	1337.6
25°	1290.6	1290.6	1309.4	1314.1	1314.1
27.5°	1260.1	1260.1	1281.3	1288.3	1288.3
30°	1227.3	1227.3	1248.4	1257.8	1262.5
32.5°	1187.4	1192.1	1215.5	1227.3	1232.0
35°	1147.5	1154.5	1178.0	1194.4	1203.8
37.5°	1105.3	1112.3	1140.5	1159.2	1171.0
40°	1060.7	1070.1	1100.6	1124.0	1138.1
42.5°	1011.4	1025.5	1060.7	1091.2	1109.9
45°	964.5	980.9	1018.4	1060.7	1081.8
47.5°	912.8	931.6	973.8	1027.8	1048.9
50°	858.9	877.6	929.3	990.3	1013.7
52.5°	804.9	826.0	887.0	952.7	980.9
55°	746.2	769.7	844.8	915.2	945.7
57.5°	685.2	713.4	797.8	872.9	905.8
60°	621.9	657.1	750.9	830.7	865.9
62.5°	556.1	598.4	704.0	788.5	826.0
65°	492.8	539.7	654.7	743.9	783.8
67.5°	424.7	483.4	605.4	701.6	739.2
70°	356.7	424.7	553.8	652.4	689.9
72.5°	288.6	370.8	502.2	591.3	591.3
75°	222.9	314.4	448.2	445.9	431.8
77.5°	169.0	262.8	368.4	314.4	316.8
80°	122.0	211.2	232.3	232.3	234.7
82.5°	82.1	161.9	150.2	147.8	152.5
85°	49.3	75.1	77.4	70.4	72.7
87.5°	23.5	25.8	21.1	14.1	14.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)