

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: P263110

Luminaire Tested: **24CZ-LD5-65-SQP-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263110  
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-4500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4586.0 lumens  
Efficiency: N/A  
Efficacy: 89.4 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

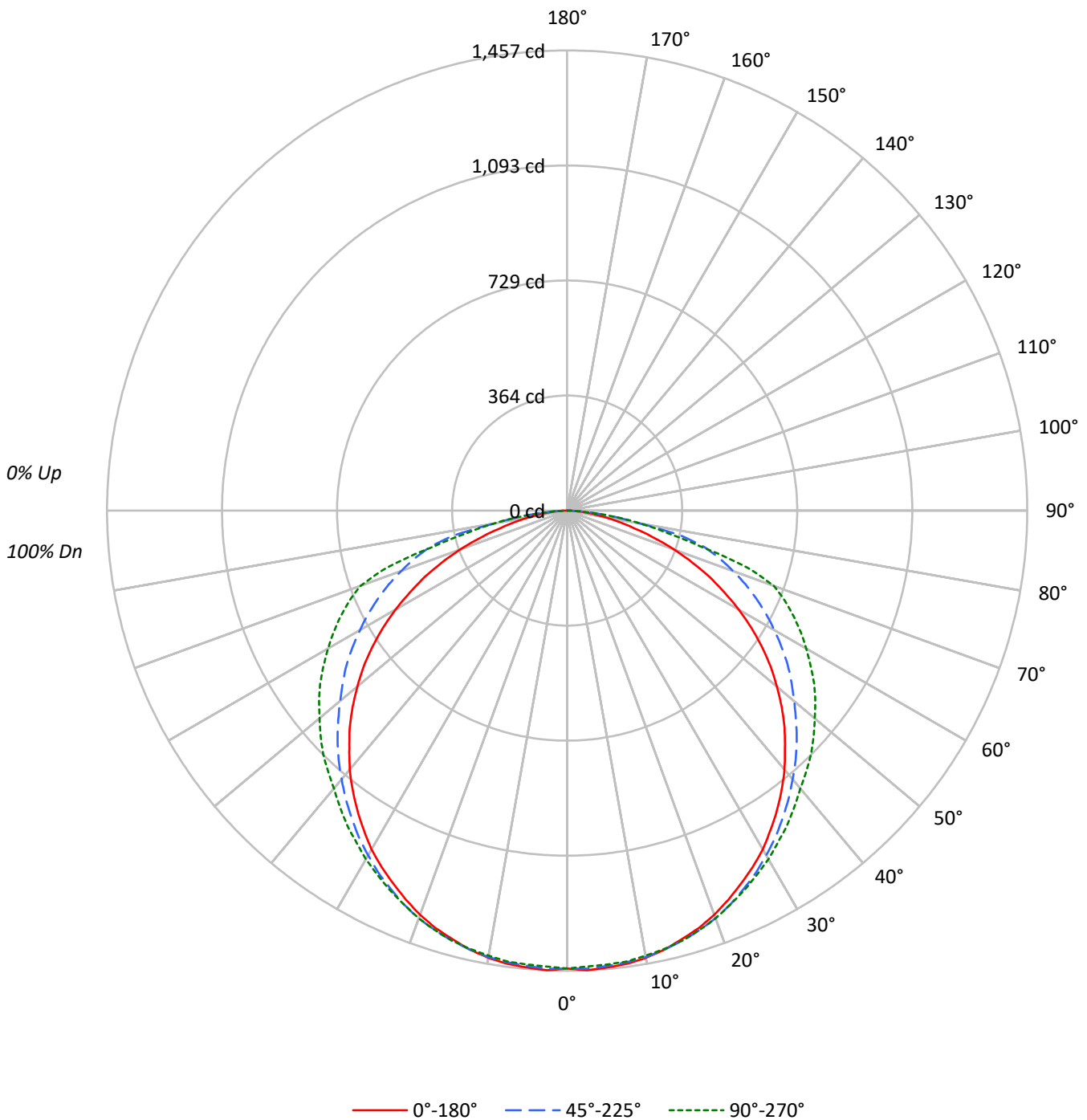
Input Watts (W): 51.314982  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1951	1951	1951
5°	1961	1955	1948
10°	1965	1961	1955
15°	1957	1963	1963
20°	1950	1967	1967
25°	1934	1962	1969
30°	1925	1958	1980
35°	1903	1953	1996
40°	1881	1951	2018
45°	1853	1956	2078
50°	1815	1964	2142
55°	1767	2000	2239
60°	1689	2040	2352
65°	1584	2104	2519
70°	1417	2199	2740
75°	1170	2352	2266
80°	955	1817	1836
85°	767	1207	1133



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.7	3.0
10°-20°	397.3	8.7
20°-30°	607.2	13.2
30°-40°	742.7	16.2
40°-50°	794.6	17.3
50°-60°	760.9	16.6
60°-70°	643.7	14.0
70°-80°	408.0	8.9
80°-90°	93.9	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°	1142.2	24.9
0°-40°	1884.9	41.1
0°-60°	3440.4	75.0
0°-90°	4586.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4586.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1450	1450	1450	1450	1450	
5°	1452	1445	1447	1445	1443	138
15°	1405	1402	1410	1410	1410	397
25°	1303	1303	1322	1326	1326	601
35°	1158	1166	1189	1206	1215	725
45°	974	990	1028	1071	1092	750
55°	753	777	853	924	955	672
65°	498	545	661	751	791	490
75°	225	317	452	450	436	245
85°	50	76	78	71	73	59
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1449.7	1449.7	1449.7	1449.7	1449.7
2.5°	1456.8	1449.7	1452.1	1449.7	1445.0
5°	1452.1	1445.0	1447.4	1445.0	1442.6
7.5°	1447.4	1440.2	1442.6	1440.2	1440.2
10°	1437.9	1430.8	1435.5	1433.1	1430.8
12.5°	1423.7	1418.9	1423.7	1421.3	1421.3
15°	1404.7	1402.3	1409.5	1409.5	1409.5
17.5°	1385.8	1383.4	1392.9	1392.9	1392.9
20°	1362.1	1359.7	1373.9	1373.9	1373.9
22.5°	1333.6	1331.3	1350.2	1350.2	1350.2
25°	1302.9	1302.9	1321.8	1326.5	1326.5
27.5°	1272.1	1272.1	1293.4	1300.5	1300.5
30°	1238.9	1238.9	1260.2	1269.7	1274.4
32.5°	1198.6	1203.4	1227.1	1238.9	1243.6
35°	1158.4	1165.5	1189.1	1205.7	1215.2
37.5°	1115.7	1122.8	1151.2	1170.2	1182.0
40°	1070.7	1080.2	1111.0	1134.7	1148.9
42.5°	1021.0	1035.2	1070.7	1101.5	1120.5
45°	973.6	990.2	1028.1	1070.7	1092.0
47.5°	921.5	940.4	983.1	1037.5	1058.9
50°	867.0	885.9	938.1	999.6	1023.3
52.5°	812.5	833.8	895.4	961.7	990.2
55°	753.3	777.0	852.8	923.8	954.6
57.5°	691.7	720.1	805.4	881.2	914.4
60°	627.7	663.3	758.0	838.6	874.1
62.5°	561.4	604.1	710.6	795.9	833.8
65°	497.5	544.8	660.9	750.9	791.2
67.5°	428.8	488.0	611.2	708.3	746.2
70°	360.1	428.8	559.0	658.5	696.4
72.5°	291.4	374.3	506.9	596.9	596.9
75°	225.0	317.4	452.4	450.1	435.9
77.5°	170.6	265.3	371.9	317.4	319.8
80°	123.2	213.2	234.5	234.5	236.9
82.5°	82.9	163.4	151.6	149.2	154.0
85°	49.7	75.8	78.2	71.1	73.4
87.5°	23.7	26.1	21.3	14.2	14.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)