

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: P263290

Luminaire Tested: **24CZ-LD5-65-SQP-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263290  
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-L82765-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: 4455.0 lumens  
Efficiency: N/A  
Efficacy: 89.0 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

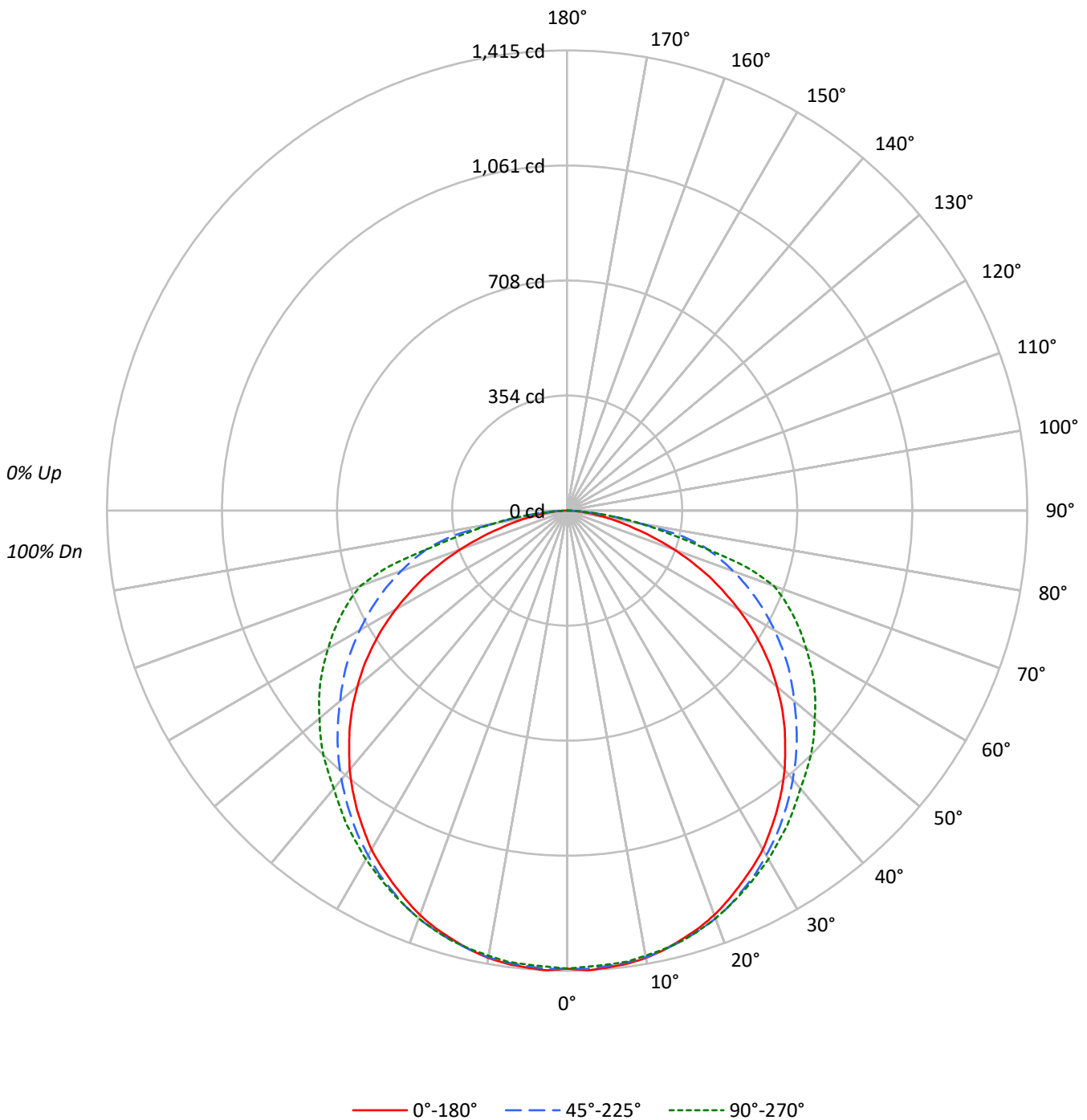
Input Watts (W): 50.034  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P263290

CATALOG NUMBER: 24CZ-LD5-65-SQP-UNV-L82765-W2A1-U-5000K

### Luminous Intensity Polar Plot





TEST NUMBER: P263290

CATALOG NUMBER: 24CZ-LD5-65-SQP-UNV-L82765-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°	1895	1895	1895
5°	1905	1899	1893
10°	1908	1905	1899
15°	1901	1907	1907
20°	1895	1911	1911
25°	1879	1906	1913
30°	1870	1902	1923
35°	1848	1897	1939
40°	1827	1896	1960
45°	1800	1900	2019
50°	1763	1908	2081
55°	1717	1943	2175
60°	1641	1982	2285
65°	1538	2044	2447
70°	1376	2137	2661
75°	1136	2285	2201
80°	927	1765	1783
85°	746	1172	1101



TEST NUMBER: P263290

CATALOG NUMBER: 24CZ-LD5-65-SQP-UNV-L82765-W2A1-U-5000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	133.8	3.0
10°-20°	386.0	8.7
20°-30°	589.9	13.2
30°-40°	721.4	16.2
40°-50°	771.9	17.3
50°-60°	739.2	16.6
60°-70°	625.3	14.0
70°-80°	396.4	8.9
80°-90°	91.2	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°	1109.6	24.9
0°-40°	1831.0	41.1
0°-60°	3342.2	75.0
0°-90°	4455.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4455.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1408	1408	1408	1408	1408	
5°	1411	1404	1406	1404	1401	134
15°	1365	1362	1369	1369	1369	385
25°	1266	1266	1284	1289	1289	584
35°	1125	1132	1155	1171	1180	704
45°	946	962	999	1040	1061	729
55°	732	755	828	898	927	653
65°	483	529	642	730	769	476
75°	219	308	440	437	423	238
85°	48	74	76	69	71	58
90°	0	0	0	0	0	



TEST NUMBER: P263290

CATALOG NUMBER: 24CZ-LD5-65-SQP-UNV-L82765-W2A1-U-5000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1408.3	1408.3	1408.3	1408.3	1408.3
2.5°	1415.2	1408.3	1410.6	1408.3	1403.7
5°	1410.6	1403.7	1406.0	1403.7	1401.4
7.5°	1406.0	1399.1	1401.4	1399.1	1399.1
10°	1396.8	1389.9	1394.5	1392.2	1389.9
12.5°	1383.0	1378.4	1383.0	1380.7	1380.7
15°	1364.6	1362.3	1369.2	1369.2	1369.2
17.5°	1346.2	1343.9	1353.1	1353.1	1353.1
20°	1323.2	1320.9	1334.7	1334.7	1334.7
22.5°	1295.6	1293.3	1311.7	1311.7	1311.7
25°	1265.6	1265.6	1284.0	1288.6	1288.6
27.5°	1235.7	1235.7	1256.4	1263.3	1263.3
30°	1203.5	1203.5	1224.2	1233.4	1238.0
32.5°	1164.4	1169.0	1192.0	1203.5	1208.1
35°	1125.3	1132.2	1155.2	1171.3	1180.5
37.5°	1083.8	1090.7	1118.4	1136.8	1148.3
40°	1040.1	1049.3	1079.2	1102.3	1116.1
42.5°	991.8	1005.6	1040.1	1070.0	1088.4
45°	945.8	961.9	998.7	1040.1	1060.8
47.5°	895.2	913.6	955.0	1007.9	1028.6
50°	842.2	860.6	911.3	971.1	994.1
52.5°	789.3	810.0	869.8	934.3	961.9
55°	731.8	754.8	828.4	897.5	927.4
57.5°	671.9	699.6	782.4	856.0	888.2
60°	609.8	644.3	736.4	814.6	849.1
62.5°	545.4	586.8	690.3	773.2	810.0
65°	483.2	529.3	642.0	729.5	768.6
67.5°	416.5	474.0	593.7	688.0	724.9
70°	349.8	416.5	543.1	639.7	676.5
72.5°	283.0	363.6	492.4	579.9	579.9
75°	218.6	308.4	439.5	437.2	423.4
77.5°	165.7	257.7	361.3	308.4	310.7
80°	119.7	207.1	227.8	227.8	230.1
82.5°	80.5	158.8	147.3	145.0	149.6
85°	48.3	73.6	75.9	69.0	71.3
87.5°	23.0	25.3	20.7	13.8	13.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)