

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: P263194

Luminaire Tested: **24CZ-LD5-75-SQP-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263194  
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-LD5-75-SQP-UNV-L93050-W2A1-U-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4581.0 lumens  
Efficiency: N/A  
Efficacy: 76.4 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

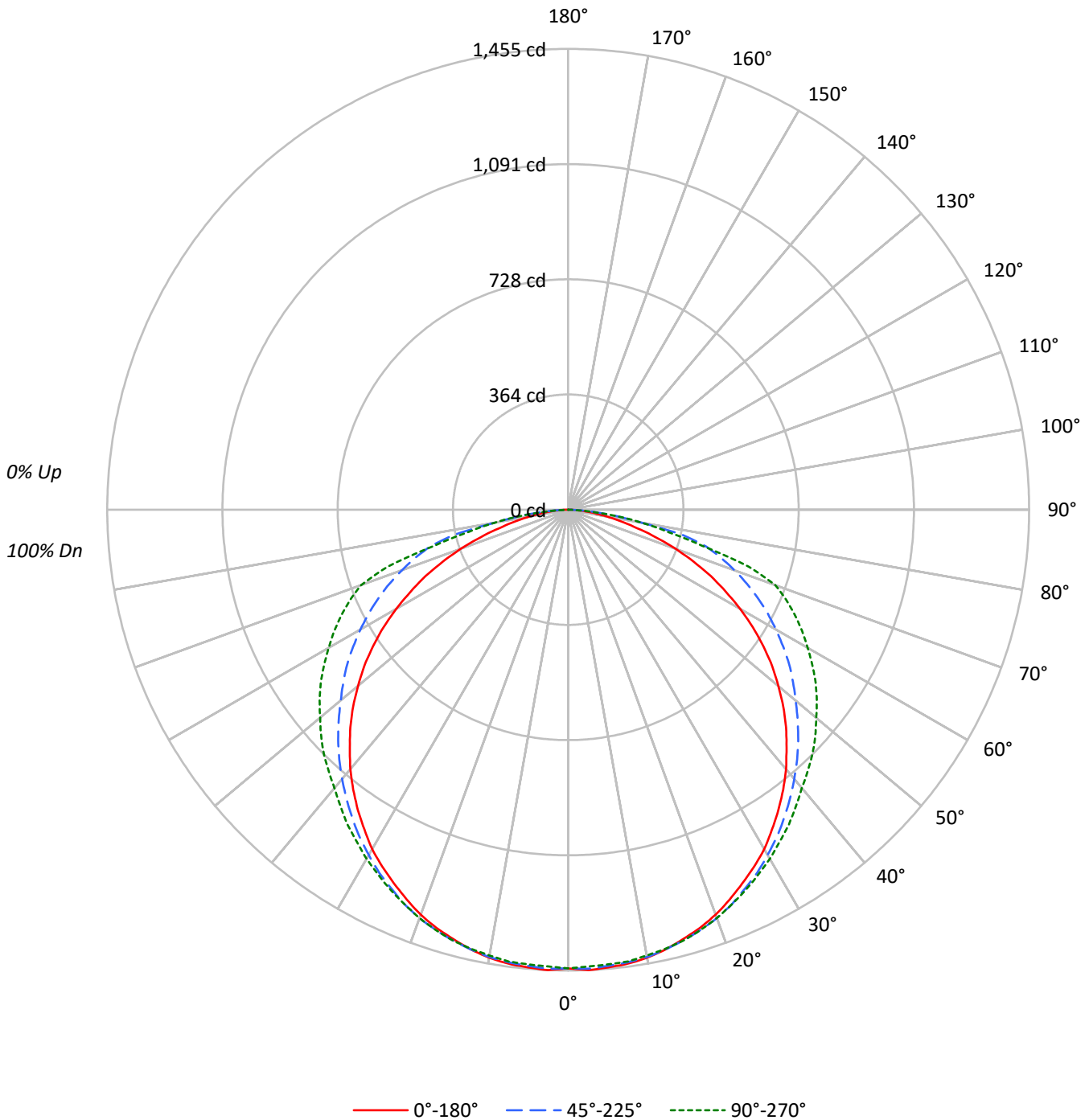
Input Watts (W): 59.922504  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1948	1948	1948
5°	1959	1953	1946
10°	1962	1959	1953
15°	1955	1961	1961
20°	1948	1965	1965
25°	1932	1960	1967
30°	1923	1956	1978
35°	1901	1951	1994
40°	1878	1949	2016
45°	1850	1954	2076
50°	1813	1961	2140
55°	1765	1998	2237
60°	1687	2038	2349
65°	1582	2102	2516
70°	1415	2197	2737
75°	1169	2349	2263
80°	953	1815	1833
85°	767	1206	1133



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.5	3.0
10°-20°	396.9	8.7
20°-30°	606.6	13.2
30°-40°	741.8	16.2
40°-50°	793.8	17.3
50°-60°	760.1	16.6
60°-70°	643.0	14.0
70°-80°	407.6	8.9
80°-90°	93.8	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°	1141.0	24.9
0°-40°	1882.8	41.1
0°-60°	3436.6	75.0
0°-90°	4581.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4581.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1448	1448	1448	1448	1448	
5°	1450	1443	1446	1443	1441	138
15°	1403	1401	1408	1408	1408	396
25°	1301	1301	1320	1325	1325	600
35°	1157	1164	1188	1204	1214	724
45°	972	989	1027	1070	1091	749
55°	752	776	852	923	954	671
65°	497	544	660	750	790	490
75°	225	317	452	450	435	244
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°	1448.1	1448.1	1448.1	1448.1	1448.1
2.5°	1455.2	1448.1	1450.5	1448.1	1443.4
5°	1450.5	1443.4	1445.8	1443.4	1441.0
7.5°	1445.8	1438.7	1441.0	1438.7	1438.7
10°	1436.3	1429.2	1433.9	1431.6	1429.2
12.5°	1422.1	1417.4	1422.1	1419.7	1419.7
15°	1403.2	1400.8	1407.9	1407.9	1407.9
17.5°	1384.2	1381.9	1391.3	1391.3	1391.3
20°	1360.6	1358.2	1372.4	1372.4	1372.4
22.5°	1332.2	1329.8	1348.7	1348.7	1348.7
25°	1301.4	1301.4	1320.4	1325.1	1325.1
27.5°	1270.7	1270.7	1292.0	1299.1	1299.1
30°	1237.5	1237.5	1258.8	1268.3	1273.0
32.5°	1197.3	1202.0	1225.7	1237.5	1242.3
35°	1157.1	1164.2	1187.8	1204.4	1213.9
37.5°	1114.5	1121.6	1150.0	1168.9	1180.7
40°	1069.5	1079.0	1109.8	1133.4	1147.6
42.5°	1019.8	1034.0	1069.5	1100.3	1119.2
45°	972.5	989.1	1026.9	1069.5	1090.8
47.5°	920.5	939.4	982.0	1036.4	1057.7
50°	866.0	885.0	937.0	998.5	1022.2
52.5°	811.6	832.9	894.4	960.7	989.1
55°	752.5	776.1	851.8	922.8	953.6
57.5°	690.9	719.3	804.5	880.2	913.4
60°	627.0	662.5	757.2	837.6	873.1
62.5°	560.8	603.4	709.9	795.1	832.9
65°	496.9	544.2	660.2	750.1	790.3
67.5°	428.3	487.4	610.5	707.5	745.4
70°	359.7	428.3	558.4	657.8	695.7
72.5°	291.0	373.9	506.4	596.3	596.3
75°	224.8	317.1	451.9	449.6	435.4
77.5°	170.4	265.0	371.5	317.1	319.4
80°	123.0	213.0	234.3	234.3	236.6
82.5°	82.8	163.3	151.4	149.1	153.8
85°	49.7	75.7	78.1	71.0	73.4
87.5°	23.7	26.0	21.3	14.2	14.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)