

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: P263196

Luminaire Tested: **24CZ-LD5-75-SQP-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263196  
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-5000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4660.8 lumens  
Efficiency: N/A  
Efficacy: 76.6 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

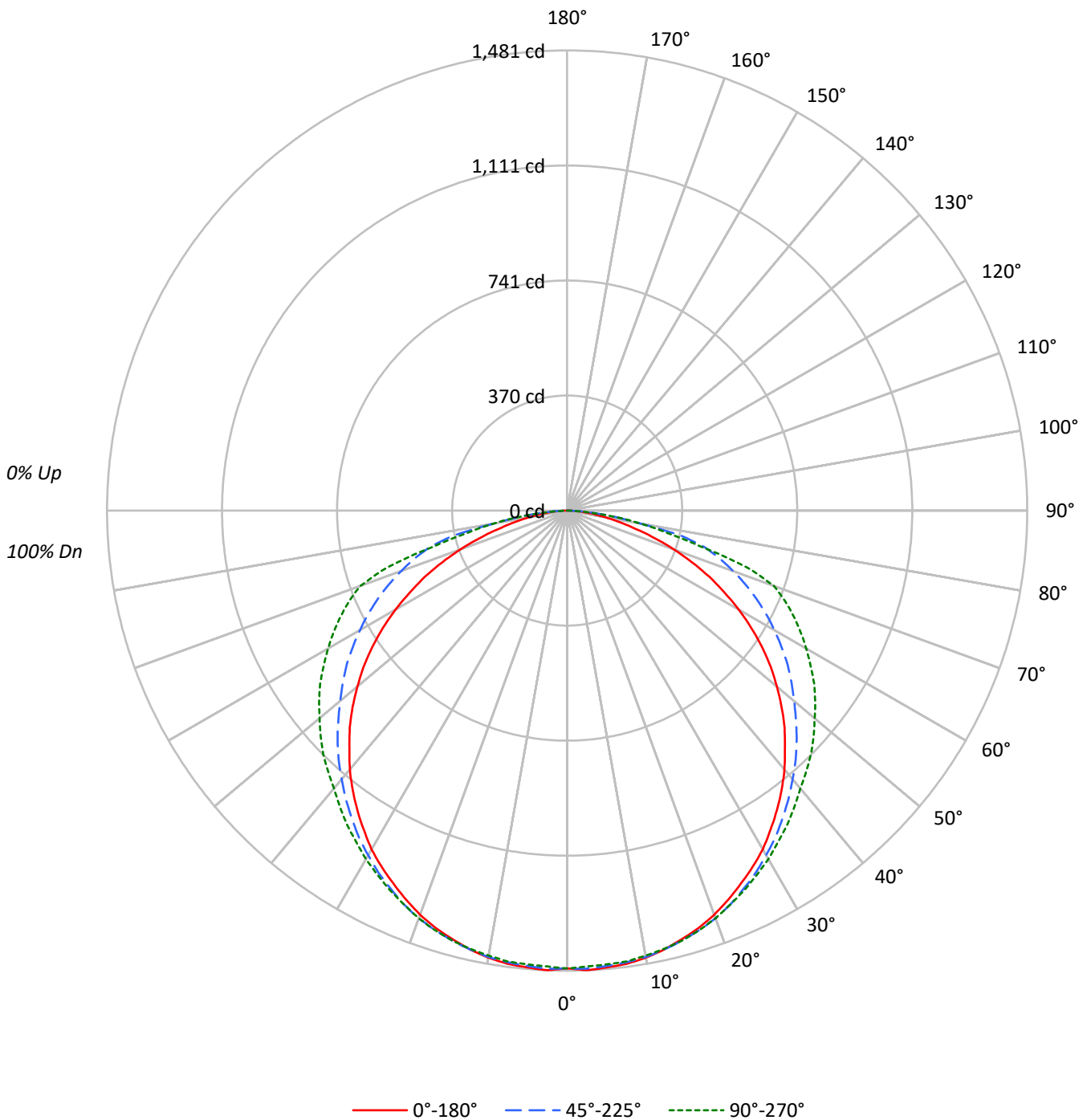
Input Watts (W): 60.856968  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P263196

CATALOG NUMBER: 24CZ-LD5-75-SQP-UNV-L93050-W2A1-U-5000K

### Luminous Intensity Polar Plot





TEST NUMBER: P263196

CATALOG NUMBER: 24CZ-LD5-75-SQP-UNV-L93050-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°	1982	1982	1982
5°	1993	1987	1980
10°	1996	1993	1987
15°	1989	1995	1995
20°	1982	1999	1999
25°	1966	1994	2002
30°	1956	1990	2012
35°	1934	1985	2029
40°	1911	1983	2051
45°	1883	1988	2112
50°	1844	1996	2177
55°	1796	2033	2276
60°	1717	2073	2391
65°	1610	2138	2560
70°	1439	2235	2784
75°	1189	2390	2303
80°	970	1846	1865
85°	781	1226	1152



TEST NUMBER: P263196

CATALOG NUMBER: 24CZ-LD5-75-SQP-UNV-L93050-W2A1-U-5000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	139.9	3.0
10°-20°	403.8	8.7
20°-30°	617.1	13.2
30°-40°	754.8	16.2
40°-50°	807.6	17.3
50°-60°	773.3	16.6
60°-70°	654.2	14.0
70°-80°	414.7	8.9
80°-90°	95.4	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°	1160.8	24.9
0°-40°	1915.6	41.1
0°-60°	3496.5	75.0
0°-90°	4660.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4660.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1473	1473	1473	1473	1473	
5°	1476	1469	1471	1469	1466	140
15°	1428	1425	1432	1432	1432	403
25°	1324	1324	1343	1348	1348	611
35°	1177	1184	1208	1225	1235	737
45°	990	1006	1045	1088	1110	762
55°	766	790	867	939	970	683
65°	506	554	672	763	804	498
75°	229	323	460	457	443	249
85°	51	77	79	72	75	60
90°	0	0	0	0	0	



TEST NUMBER: P263196

CATALOG NUMBER: 24CZ-LD5-75-SQP-UNV-L93050-W2A1-U-5000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1473.4	1473.4	1473.4	1473.4	1473.4
2.5°	1480.6	1473.4	1475.8	1473.4	1468.6
5°	1475.8	1468.6	1471.0	1468.6	1466.1
7.5°	1471.0	1463.7	1466.1	1463.7	1463.7
10°	1461.3	1454.1	1458.9	1456.5	1454.1
12.5°	1446.9	1442.1	1446.9	1444.5	1444.5
15°	1427.6	1425.2	1432.4	1432.4	1432.4
17.5°	1408.4	1406.0	1415.6	1415.6	1415.6
20°	1384.3	1381.9	1396.3	1396.3	1396.3
22.5°	1355.4	1353.0	1372.3	1372.3	1372.3
25°	1324.1	1324.1	1343.4	1348.2	1348.2
27.5°	1292.8	1292.8	1314.5	1321.7	1321.7
30°	1259.1	1259.1	1280.8	1290.4	1295.2
32.5°	1218.2	1223.0	1247.1	1259.1	1263.9
35°	1177.2	1184.5	1208.5	1225.4	1235.0
37.5°	1133.9	1141.1	1170.0	1189.3	1201.3
40°	1088.2	1097.8	1129.1	1153.2	1167.6
42.5°	1037.6	1052.1	1088.2	1119.5	1138.7
45°	989.5	1006.3	1044.8	1088.2	1109.8
47.5°	936.5	955.8	999.1	1054.5	1076.1
50°	881.1	900.4	953.4	1015.9	1040.0
52.5°	825.8	847.4	910.0	977.4	1006.3
55°	765.6	789.6	866.7	938.9	970.2
57.5°	703.0	731.9	818.5	895.6	929.3
60°	638.0	674.1	770.4	852.2	888.4
62.5°	570.6	613.9	722.2	808.9	847.4
65°	505.6	553.7	671.7	763.2	804.1
67.5°	435.8	495.9	621.1	719.8	758.4
70°	365.9	435.8	568.2	669.3	707.8
72.5°	296.1	380.4	515.2	606.7	606.7
75°	228.7	322.6	459.8	457.4	443.0
77.5°	173.3	269.6	378.0	322.6	325.0
80°	125.2	216.7	238.3	238.3	240.7
82.5°	84.3	166.1	154.1	151.7	156.5
85°	50.6	77.0	79.4	72.2	74.6
87.5°	24.1	26.5	21.7	14.4	14.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)