

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: P230424

Luminaire Tested: **24CZ-LD5-75-SQP-UNV-L930-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230424  
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-L930-CD1-U  
Description: CRUZE 2x4 LED TROFFER  
WITH SQP LENS  
Light Source: (168) 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4286.4 lumens  
Efficiency: N/A  
Efficacy: 62.1 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

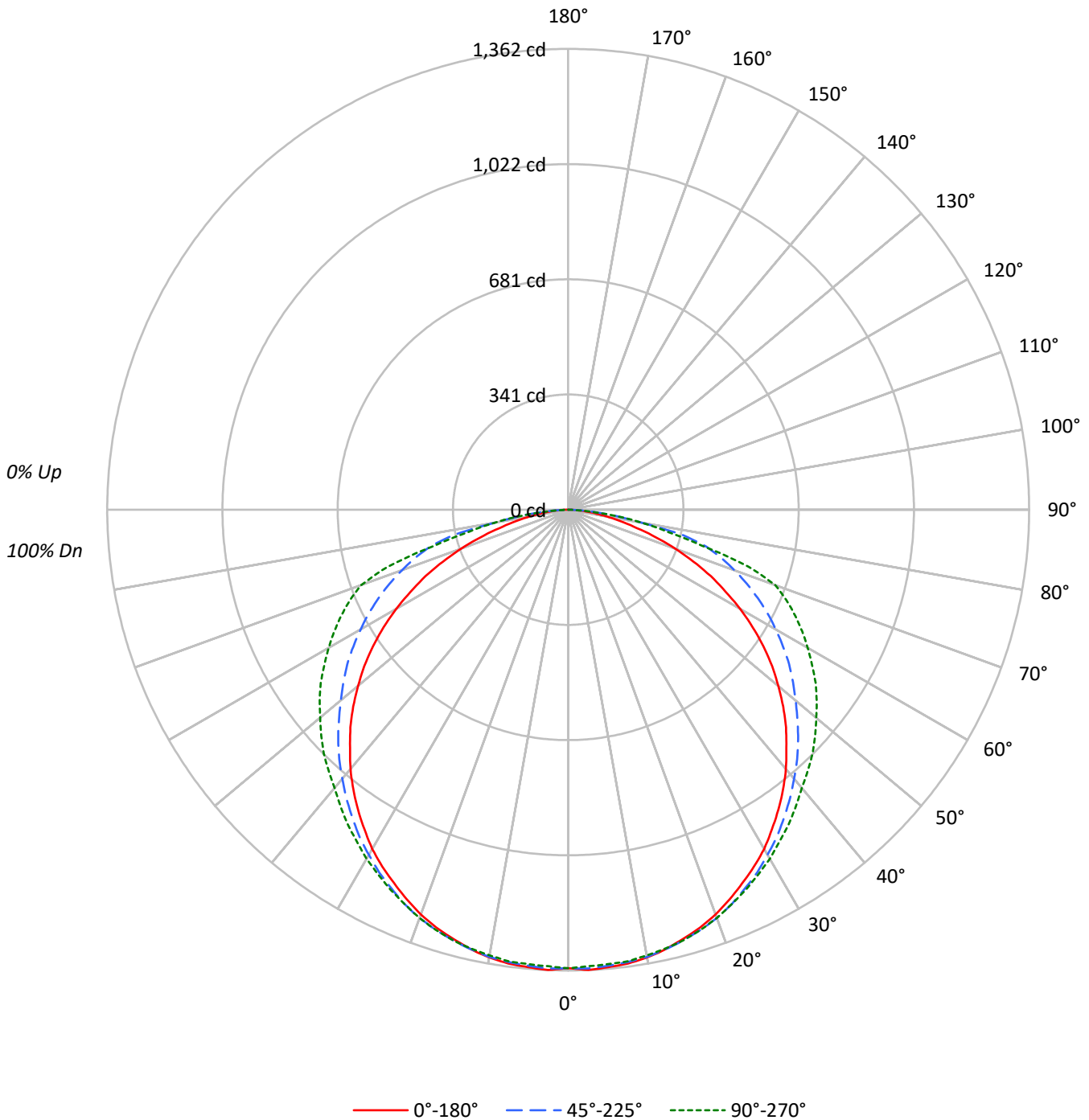
Input Watts (W): 69.06  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1823	1823	1823
5°	1833	1827	1821
10°	1836	1833	1827
15°	1829	1835	1835
20°	1823	1839	1839
25°	1808	1834	1841
30°	1799	1830	1851
35°	1778	1826	1866
40°	1758	1824	1886
45°	1732	1828	1942
50°	1696	1835	2002
55°	1652	1870	2093
60°	1579	1907	2199
65°	1480	1967	2354
70°	1324	2055	2561
75°	1093	2198	2118
80°	892	1698	1715
85°	718	1129	1059



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	128.7	3.0
10°-20°	371.3	8.7
20°-30°	567.6	13.2
30°-40°	694.1	16.2
40°-50°	742.7	17.3
50°-60°	711.2	16.6
60°-70°	601.6	14.0
70°-80°	381.4	8.9
80°-90°	87.7	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°	1067.6	24.9
0°-40°	1761.7	41.1
0°-60°	3215.7	75.0
0°-90°	4286.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4286.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1355	1355	1355	1355	1355	
5°	1357	1351	1353	1351	1348	129
15°	1313	1311	1317	1317	1317	371
25°	1218	1218	1236	1240	1240	562
35°	1083	1089	1112	1127	1136	677
45°	910	926	961	1001	1021	701
55°	704	726	797	864	892	628
65°	465	509	618	702	740	458
75°	210	297	423	421	407	229
85°	46	71	73	66	69	55
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1355.0	1355.0	1355.0	1355.0	1355.0
2.5°	1361.7	1355.0	1357.2	1355.0	1350.6
5°	1357.2	1350.6	1352.8	1350.6	1348.4
7.5°	1352.8	1346.2	1348.4	1346.2	1346.2
10°	1343.9	1337.3	1341.7	1339.5	1337.3
12.5°	1330.7	1326.2	1330.7	1328.4	1328.4
15°	1312.9	1310.7	1317.4	1317.4	1317.4
17.5°	1295.2	1293.0	1301.9	1301.9	1301.9
20°	1273.1	1270.9	1284.2	1284.2	1284.2
22.5°	1246.5	1244.3	1262.0	1262.0	1262.0
25°	1217.7	1217.7	1235.5	1239.9	1239.9
27.5°	1189.0	1189.0	1208.9	1215.5	1215.5
30°	1158.0	1158.0	1177.9	1186.7	1191.2
32.5°	1120.3	1124.8	1146.9	1158.0	1162.4
35°	1082.7	1089.3	1111.5	1127.0	1135.8
37.5°	1042.8	1049.5	1076.0	1093.8	1104.8
40°	1000.8	1009.6	1038.4	1060.5	1073.8
42.5°	954.3	967.6	1000.8	1029.5	1047.3
45°	910.0	925.5	960.9	1000.8	1020.7
47.5°	861.3	879.0	918.8	969.8	989.7
50°	810.4	828.1	876.8	934.3	956.5
52.5°	759.4	779.4	836.9	898.9	925.5
55°	704.1	726.2	797.1	863.5	892.3
57.5°	646.5	673.1	752.8	823.6	854.6
60°	586.7	619.9	708.5	783.8	817.0
62.5°	524.7	564.6	664.2	743.9	779.4
65°	465.0	509.2	617.7	701.9	739.5
67.5°	400.7	456.1	571.2	662.0	697.4
70°	336.5	400.7	522.5	615.5	650.9
72.5°	272.3	349.8	473.8	557.9	557.9
75°	210.3	296.7	422.9	420.7	407.4
77.5°	159.4	248.0	347.6	296.7	298.9
80°	115.1	199.3	219.2	219.2	221.4
82.5°	77.5	152.8	141.7	139.5	143.9
85°	46.5	70.9	73.1	66.4	68.6
87.5°	22.1	24.4	19.9	13.3	13.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)