

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: P230425

Luminaire Tested: **24CZ-LD5-75-SQP-UNV-L935-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230425  
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-L935-CD1-U  
Description: CRUZE 2x4 LED TROFFER  
WITH SQP LENS  
Light Source: (168) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4455.6 lumens  
Efficiency: N/A  
Efficacy: 64.5 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

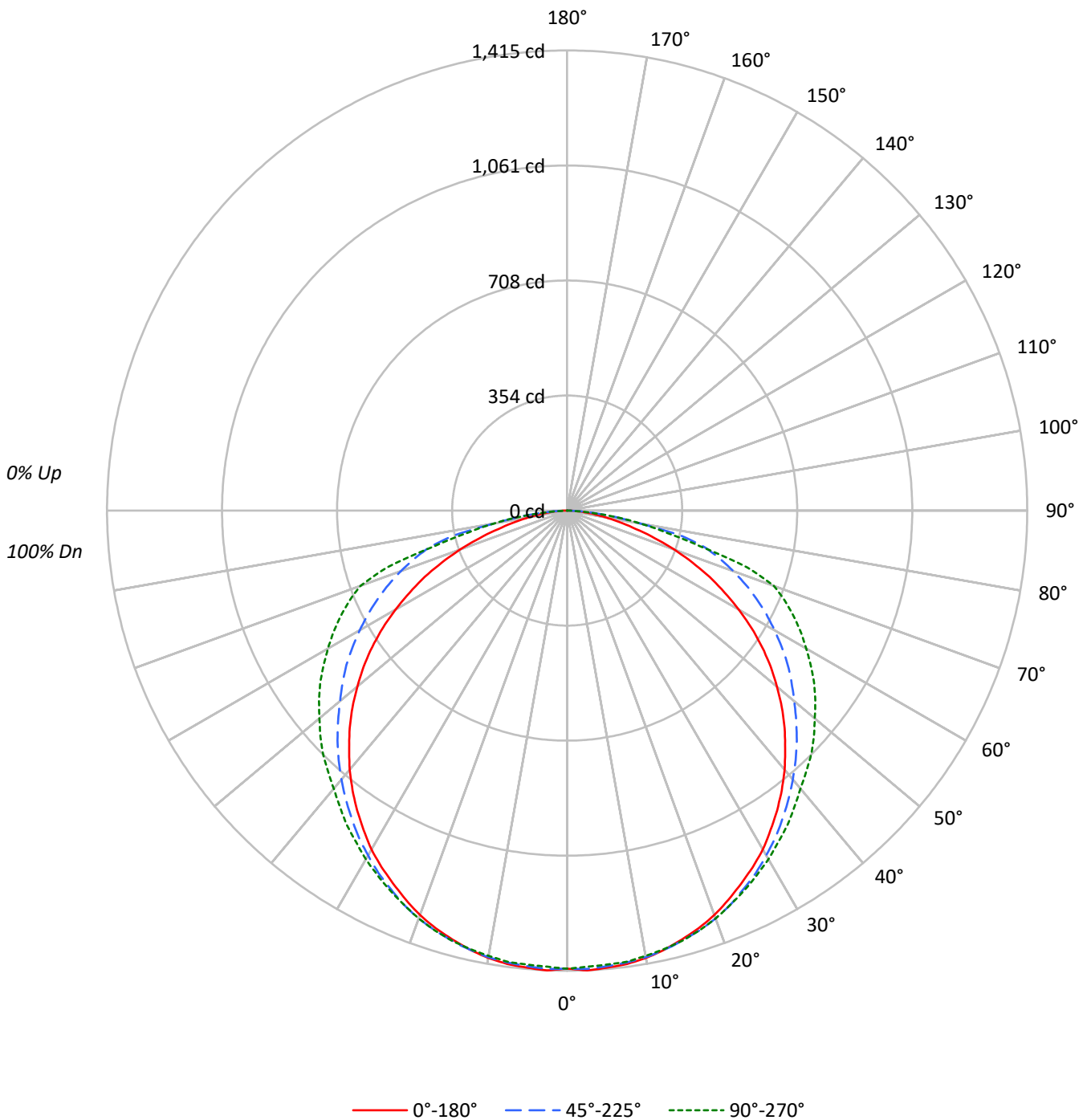
Input Watts (W): 69.06  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1895	1895	1895
5°	1905	1899	1893
10°	1909	1906	1899
15°	1901	1908	1908
20°	1895	1911	1911
25°	1879	1907	1913
30°	1870	1902	1924
35°	1849	1898	1939
40°	1827	1896	1961
45°	1800	1901	2019
50°	1763	1908	2081
55°	1717	1943	2176
60°	1641	1982	2285
65°	1539	2044	2447
70°	1376	2137	2662
75°	1136	2285	2202
80°	927	1765	1783
85°	746	1172	1101



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	133.8	3.0
10°-20°	386.0	8.7
20°-30°	590.0	13.2
30°-40°	721.5	16.2
40°-50°	772.1	17.3
50°-60°	739.3	16.6
60°-70°	625.4	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°	1109.7	24.9
0°-40°	1831.3	41.1
0°-60°	3342.7	75.0
0°-90°	4455.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4455.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1408	1408	1408	1408	1408	
5°	1411	1404	1406	1404	1402	134
15°	1365	1362	1369	1369	1369	385
25°	1266	1266	1284	1289	1289	584
35°	1125	1132	1155	1172	1181	704
45°	946	962	999	1040	1061	729
55°	732	755	828	898	928	653
65°	483	529	642	730	769	476
75°	219	308	440	437	424	238
85°	48	74	76	69	71	58
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1408.5	1408.5	1408.5	1408.5	1408.5
2.5°	1415.4	1408.5	1410.8	1408.5	1403.9
5°	1410.8	1403.9	1406.2	1403.9	1401.6
7.5°	1406.2	1399.3	1401.6	1399.3	1399.3
10°	1397.0	1390.1	1394.7	1392.4	1390.1
12.5°	1383.2	1378.6	1383.2	1380.9	1380.9
15°	1364.8	1362.5	1369.4	1369.4	1369.4
17.5°	1346.4	1344.1	1353.3	1353.3	1353.3
20°	1323.4	1321.1	1334.9	1334.9	1334.9
22.5°	1295.7	1293.4	1311.9	1311.9	1311.9
25°	1265.8	1265.8	1284.2	1288.8	1288.8
27.5°	1235.9	1235.9	1256.6	1263.5	1263.5
30°	1203.7	1203.7	1224.4	1233.6	1238.2
32.5°	1164.6	1169.2	1192.2	1203.7	1208.3
35°	1125.4	1132.3	1155.4	1171.5	1180.7
37.5°	1084.0	1090.9	1118.5	1136.9	1148.4
40°	1040.3	1049.5	1079.4	1102.4	1116.2
42.5°	991.9	1005.8	1040.3	1070.2	1088.6
45°	945.9	962.0	998.9	1040.3	1061.0
47.5°	895.3	913.7	955.1	1008.1	1028.8
50°	842.3	860.8	911.4	971.2	994.2
52.5°	789.4	810.1	870.0	934.4	962.0
55°	731.9	754.9	828.5	897.6	927.5
57.5°	672.0	699.7	782.5	856.2	888.4
60°	609.9	644.4	736.5	814.7	849.3
62.5°	545.5	586.9	690.4	773.3	810.1
65°	483.3	529.3	642.1	729.6	768.7
67.5°	416.6	474.1	593.8	688.1	725.0
70°	349.8	416.6	543.2	639.8	676.6
72.5°	283.1	363.6	492.5	580.0	580.0
75°	218.6	308.4	439.6	437.3	423.5
77.5°	165.7	257.8	361.3	308.4	310.7
80°	119.7	207.1	227.8	227.8	230.1
82.5°	80.6	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)