

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: P230455

Luminaire Tested: **24CZ-LD5-60SE-SQP-UNV-L950-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230455
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-LD5-60SE-SQP-UNV-L950-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH SQP LENS
Light Source: (84) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3952.8 lumens
Efficiency: N/A
Efficacy: 65.9 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

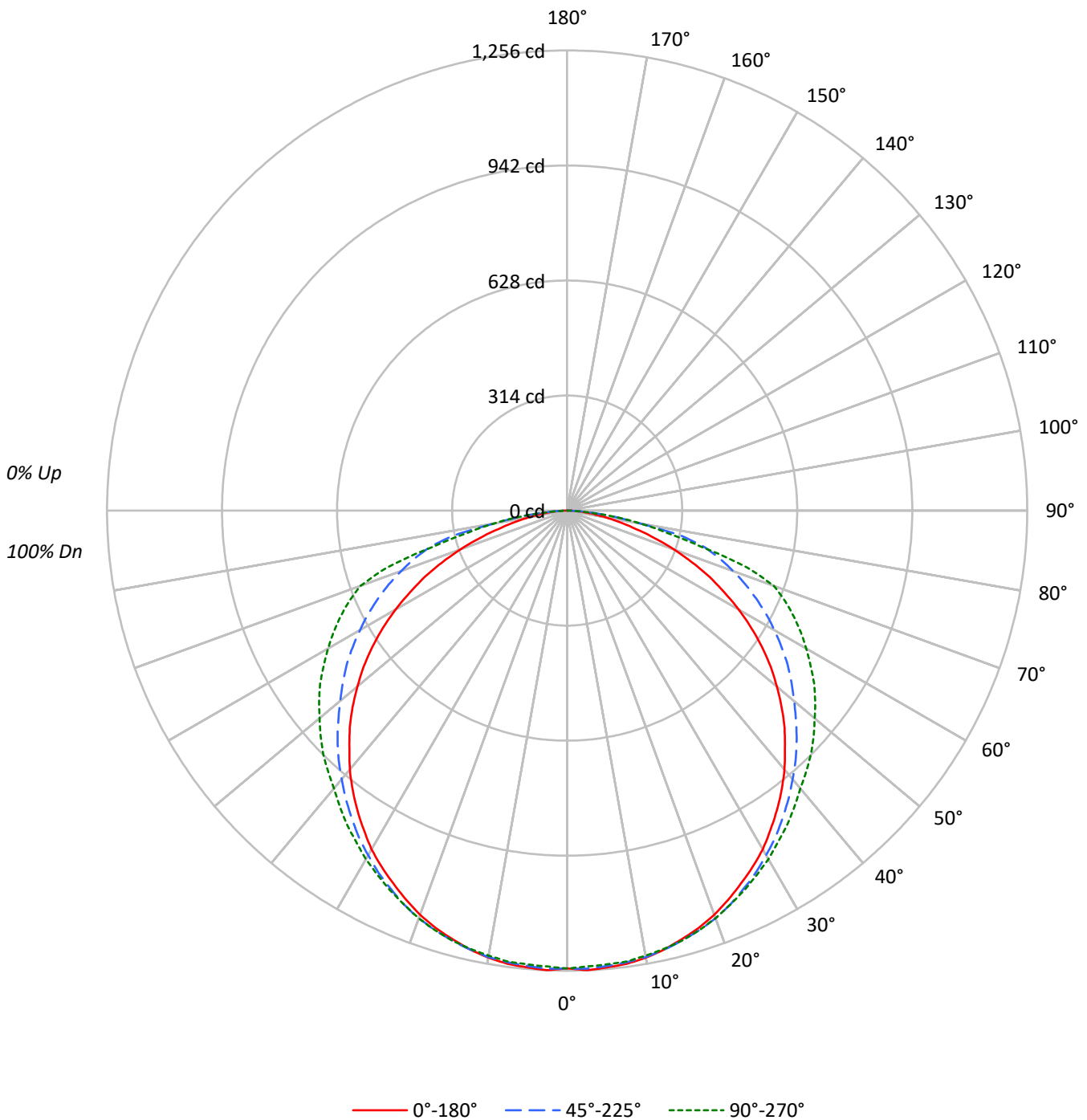
Input Watts (W): 60
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1681	1681	1681
5°	1690	1685	1679
10°	1693	1690	1685
15°	1686	1692	1692
20°	1681	1696	1696
25°	1667	1691	1697
30°	1659	1688	1707
35°	1640	1684	1720
40°	1621	1682	1739
45°	1597	1686	1791
50°	1564	1692	1846
55°	1523	1724	1930
60°	1456	1758	2027
65°	1365	1813	2171
70°	1221	1895	2362
75°	1009	2027	1953
80°	823	1566	1582
85°	662	1041	977



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.7	3.0
10°-20°	342.4	8.7
20°-30°	523.4	13.2
30°-40°	640.1	16.2
40°-50°	684.9	17.3
50°-60°	655.9	16.6
60°-70°	554.8	14.0
70°-80°	351.7	8.9
80°-90°	80.9	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°	984.5	24.9
0°-40°	1624.6	41.1
0°-60°	2965.4	75.0
0°-90°	3952.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3952.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1250	1250	1250	1250	1250	
5°	1252	1246	1248	1246	1243	119
15°	1211	1209	1215	1215	1215	342
25°	1123	1123	1139	1143	1143	518
35°	998	1004	1025	1039	1047	625
45°	839	853	886	923	941	646
55°	649	670	735	796	823	579
65°	429	470	570	647	682	422
75°	194	274	390	388	376	211
85°	43	65	67	61	63	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1249.5	1249.5	1249.5	1249.5	1249.5
2.5°	1255.7	1249.5	1251.6	1249.5	1245.5
5°	1251.6	1245.5	1247.5	1245.5	1243.4
7.5°	1247.5	1241.4	1243.4	1241.4	1241.4
10°	1239.3	1233.2	1237.3	1235.2	1233.2
12.5°	1227.1	1223.0	1227.1	1225.0	1225.0
15°	1210.7	1208.7	1214.8	1214.8	1214.8
17.5°	1194.4	1192.4	1200.5	1200.5	1200.5
20°	1174.0	1172.0	1184.2	1184.2	1184.2
22.5°	1149.5	1147.5	1163.8	1163.8	1163.8
25°	1123.0	1123.0	1139.3	1143.4	1143.4
27.5°	1096.4	1096.4	1114.8	1120.9	1120.9
30°	1067.8	1067.8	1086.2	1094.4	1098.5
32.5°	1033.1	1037.2	1057.6	1067.8	1071.9
35°	998.4	1004.5	1025.0	1039.2	1047.4
37.5°	961.7	967.8	992.3	1008.6	1018.8
40°	922.9	931.0	957.6	978.0	990.2
42.5°	880.0	892.2	922.9	949.4	965.7
45°	839.2	853.4	886.1	922.9	941.2
47.5°	794.2	810.6	847.3	894.3	912.7
50°	747.3	763.6	808.5	861.6	882.0
52.5°	700.3	718.7	771.8	828.9	853.4
55°	649.3	669.7	735.0	796.3	822.8
57.5°	596.2	620.7	694.2	759.5	788.1
60°	541.1	571.7	653.4	722.8	753.4
62.5°	483.9	520.6	612.5	686.0	718.7
65°	428.8	469.6	569.6	647.2	681.9
67.5°	369.6	420.6	526.8	610.5	643.1
70°	310.3	369.6	481.8	567.6	600.3
72.5°	251.1	322.6	436.9	514.5	514.5
75°	194.0	273.6	390.0	387.9	375.7
77.5°	147.0	228.7	320.6	273.6	275.6
80°	106.2	183.8	202.1	202.1	204.2
82.5°	71.5	140.9	130.7	128.6	132.7
85°	42.9	65.3	67.4	61.3	63.3
87.5°	20.4	22.5	18.4	12.3	12.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)