

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: P230459

Luminaire Tested: **24CZ-LD5-65SE-SQP-UNV-L950-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230459
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-LD5-65SE-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: 4334.8 lumens
Efficiency: N/A
Efficacy: 72.2 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

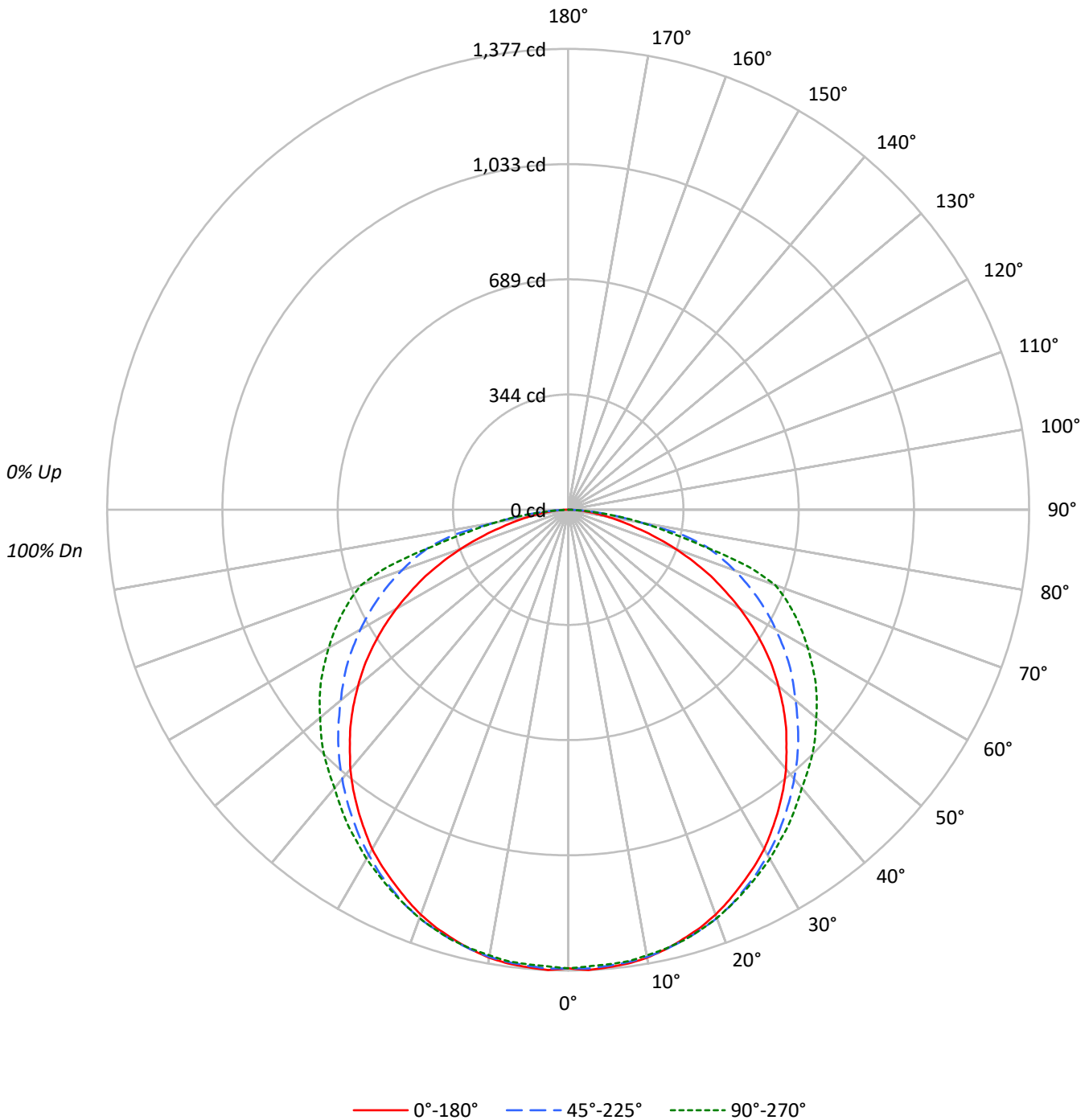
Input Watts (W): 60
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1844	1844	1844
5°	1854	1848	1842
10°	1857	1854	1848
15°	1850	1856	1856
20°	1843	1860	1860
25°	1828	1855	1862
30°	1819	1851	1872
35°	1798	1846	1887
40°	1778	1844	1907
45°	1751	1849	1964
50°	1715	1856	2025
55°	1670	1891	2117
60°	1597	1928	2223
65°	1497	1989	2381
70°	1339	2079	2590
75°	1106	2223	2142
80°	902	1718	1735
85°	726	1141	1071



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.1	3.0
10°-20°	375.5	8.7
20°-30°	574.0	13.2
30°-40°	702.0	16.2
40°-50°	751.1	17.3
50°-60°	719.2	16.6
60°-70°	608.4	14.0
70°-80°	385.7	8.9
80°-90°	88.7	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°	1079.6	24.9
0°-40°	1781.6	41.1
0°-60°	3252.0	75.0
0°-90°	4334.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4334.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1370	1370	1370	1370	1370	
5°	1372	1366	1368	1366	1364	131
15°	1328	1326	1332	1332	1332	375
25°	1232	1232	1249	1254	1254	568
35°	1095	1102	1124	1140	1149	685
45°	920	936	972	1012	1032	709
55°	712	734	806	873	902	635
65°	470	515	625	710	748	463
75°	213	300	428	425	412	231
85°	47	72	74	67	69	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1370.3	1370.3	1370.3	1370.3	1370.3
2.5°	1377.0	1370.3	1372.5	1370.3	1365.8
5°	1372.5	1365.8	1368.1	1365.8	1363.6
7.5°	1368.1	1361.3	1363.6	1361.3	1361.3
10°	1359.1	1352.4	1356.9	1354.6	1352.4
12.5°	1345.7	1341.2	1345.7	1343.4	1343.4
15°	1327.8	1325.5	1332.2	1332.2	1332.2
17.5°	1309.8	1307.6	1316.6	1316.6	1316.6
20°	1287.5	1285.2	1298.7	1298.7	1298.7
22.5°	1260.6	1258.3	1276.3	1276.3	1276.3
25°	1231.5	1231.5	1249.4	1253.9	1253.9
27.5°	1202.4	1202.4	1222.5	1229.2	1229.2
30°	1171.0	1171.0	1191.2	1200.1	1204.6
32.5°	1133.0	1137.4	1159.8	1171.0	1175.5
35°	1094.9	1101.6	1124.0	1139.7	1148.6
37.5°	1054.6	1061.3	1088.2	1106.1	1117.3
40°	1012.1	1021.0	1050.1	1072.5	1085.9
42.5°	965.0	978.5	1012.1	1041.2	1059.1
45°	920.3	935.9	971.8	1012.1	1032.2
47.5°	871.0	888.9	929.2	980.7	1000.9
50°	819.5	837.4	886.7	944.9	967.3
52.5°	768.0	788.1	846.4	909.1	935.9
55°	712.0	734.4	806.1	873.2	902.3
57.5°	653.8	680.7	761.3	832.9	864.3
60°	593.3	626.9	716.5	792.6	826.2
62.5°	530.7	571.0	671.7	752.3	788.1
65°	470.2	515.0	624.7	709.8	747.8
67.5°	405.3	461.2	577.7	669.5	705.3
70°	340.3	405.3	528.4	622.5	658.3
72.5°	275.4	353.8	479.2	564.2	564.2
75°	212.7	300.0	427.7	425.4	412.0
77.5°	161.2	250.8	351.5	300.0	302.3
80°	116.4	201.5	221.7	221.7	223.9
82.5°	78.4	154.5	143.3	141.1	145.5
85°	47.0	71.6	73.9	67.2	69.4
87.5°	22.4	24.6	20.2	13.4	13.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)