

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: P230417

Luminaire Tested: **24CZ-LD5-65-SQP-UNV-L935-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230417
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-LD5-65-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: 3913.4 lumens
Efficiency: N/A
Efficacy: 67.9 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

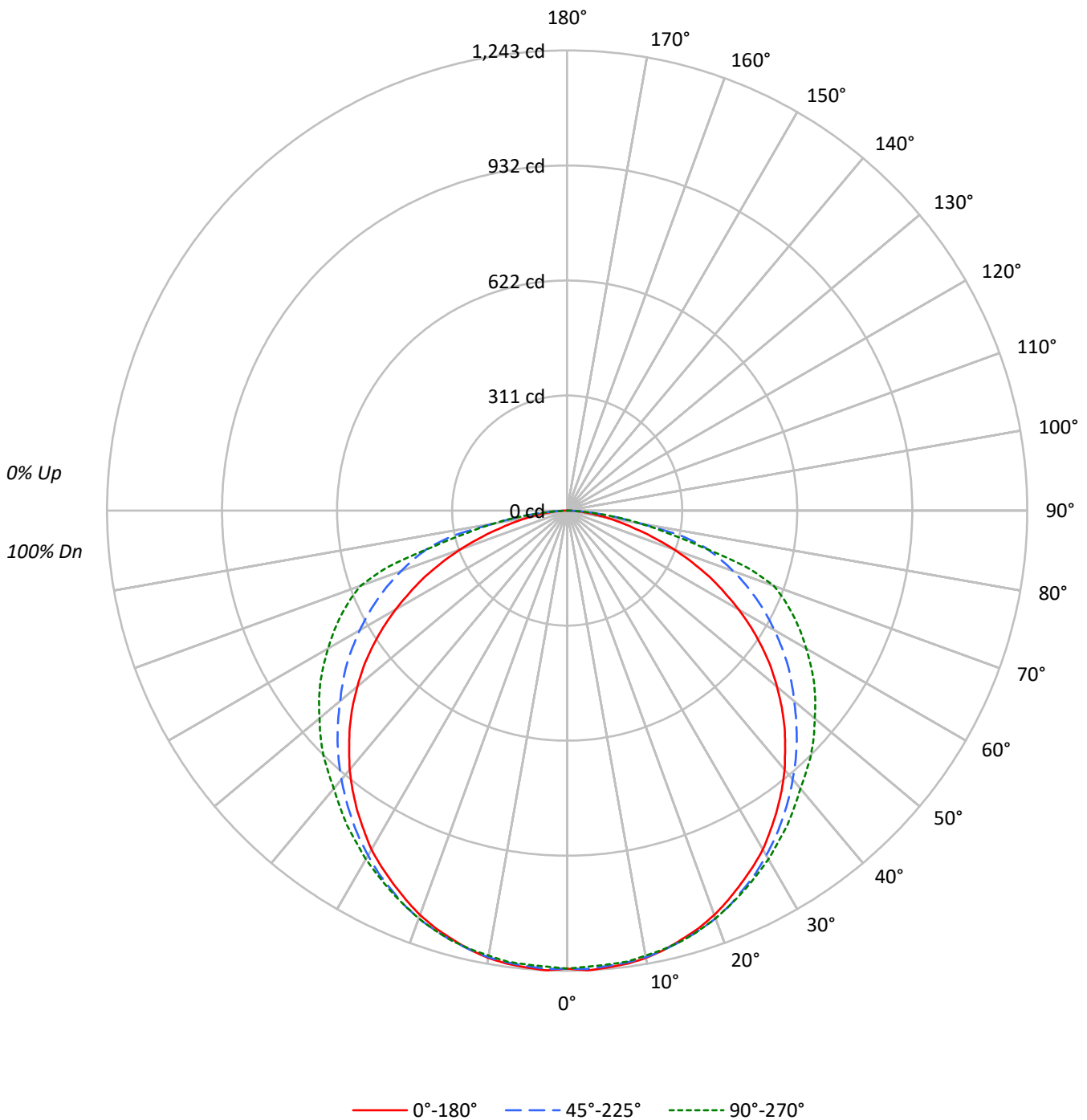
Input Watts (W): 57.64
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1665	1665	1665
5°	1674	1668	1663
10°	1676	1674	1668
15°	1670	1675	1675
20°	1664	1679	1679
25°	1651	1674	1681
30°	1643	1671	1690
35°	1624	1667	1703
40°	1605	1665	1722
45°	1581	1669	1773
50°	1549	1676	1828
55°	1508	1707	1911
60°	1442	1741	2007
65°	1351	1796	2149
70°	1209	1876	2338
75°	998	2007	1933
80°	814	1550	1566
85°	655	1030	968



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.5	3.0
10°-20°	339.0	8.7
20°-30°	518.2	13.2
30°-40°	633.7	16.2
40°-50°	678.1	17.3
50°-60°	649.3	16.6
60°-70°	549.3	14.0
70°-80°	348.2	8.9
80°-90°	80.1	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°	974.7	24.9
0°-40°	1608.4	41.1
0°-60°	2935.8	75.0
0°-90°	3913.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3913.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1237	1237	1237	1237	1237	
5°	1239	1233	1235	1233	1231	118
15°	1199	1197	1203	1203	1203	339
25°	1112	1112	1128	1132	1132	513
35°	988	994	1015	1029	1037	618
45°	831	845	877	914	932	640
55°	643	663	728	788	815	573
65°	424	465	564	641	675	418
75°	192	271	386	384	372	209
85°	42	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°	1237.1	1237.1	1237.1	1237.1	1237.1
2.5°	1243.2	1237.1	1239.1	1237.1	1233.1
5°	1239.1	1233.1	1235.1	1233.1	1231.0
7.5°	1235.1	1229.0	1231.0	1229.0	1229.0
10°	1227.0	1220.9	1225.0	1222.9	1220.9
12.5°	1214.9	1210.8	1214.9	1212.8	1212.8
15°	1198.7	1196.7	1202.7	1202.7	1202.7
17.5°	1182.5	1180.5	1188.6	1188.6	1188.6
20°	1162.3	1160.3	1172.4	1172.4	1172.4
22.5°	1138.0	1136.0	1152.2	1152.2	1152.2
25°	1111.8	1111.8	1127.9	1132.0	1132.0
27.5°	1085.5	1085.5	1103.7	1109.7	1109.7
30°	1057.2	1057.2	1075.4	1083.5	1087.5
32.5°	1022.8	1026.9	1047.1	1057.2	1061.2
35°	988.5	994.5	1014.7	1028.9	1037.0
37.5°	952.1	958.1	982.4	998.6	1008.7
40°	913.7	921.8	948.0	968.2	980.4
42.5°	871.2	883.3	913.7	939.9	956.1
45°	830.8	844.9	877.3	913.7	931.9
47.5°	786.3	802.5	838.9	885.4	903.6
50°	739.8	756.0	800.5	853.0	873.2
52.5°	693.3	711.5	764.1	820.7	844.9
55°	642.8	663.0	727.7	788.3	814.6
57.5°	590.2	614.5	687.3	752.0	780.3
60°	535.7	566.0	646.8	715.6	745.9
62.5°	479.1	515.5	606.4	679.2	711.5
65°	424.5	464.9	564.0	640.8	675.1
67.5°	365.9	416.4	521.5	604.4	636.7
70°	307.3	365.9	477.0	561.9	594.3
72.5°	248.6	319.4	432.6	509.4	509.4
75°	192.0	270.9	386.1	384.1	371.9
77.5°	145.5	226.4	317.4	270.9	272.9
80°	105.1	181.9	200.1	200.1	202.1
82.5°	70.7	139.5	129.4	127.3	131.4
85°	42.4	64.7	66.7	60.6	62.7
87.5°	20.2	22.2	18.2	12.1	12.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)