

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: P230457

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230457
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-L935-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH SQP LENS
Light Source: (84) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3887.8 lumens
Efficiency: N/A
Efficacy: 64.8 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

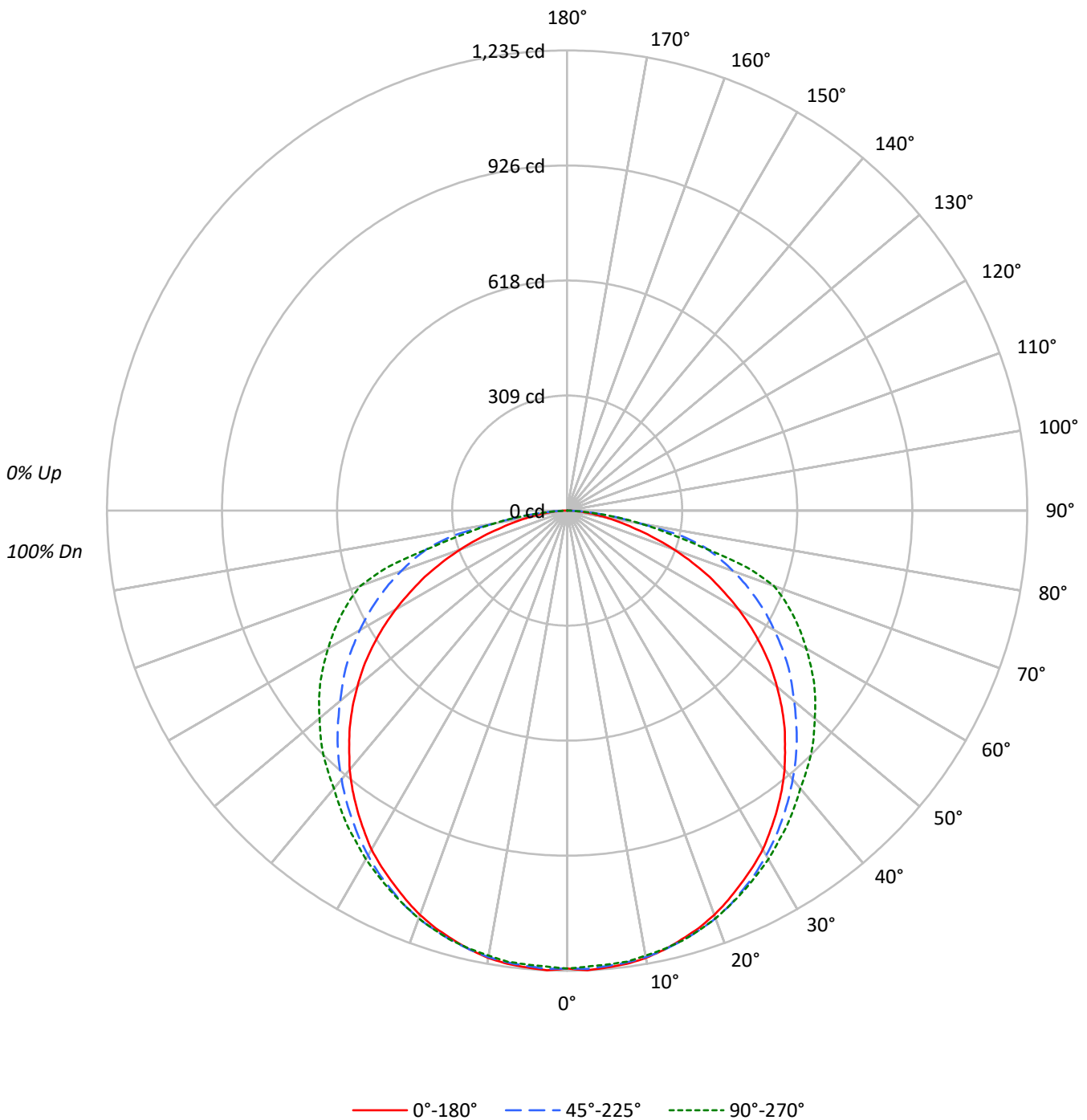
Input Watts (W): 60
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1654	1654	1654
5°	1663	1657	1652
10°	1665	1663	1657
15°	1659	1664	1664
20°	1653	1668	1668
25°	1640	1664	1670
30°	1632	1660	1679
35°	1613	1656	1692
40°	1594	1654	1711
45°	1571	1658	1762
50°	1539	1665	1816
55°	1498	1696	1898
60°	1432	1729	1994
65°	1343	1784	2135
70°	1201	1864	2323
75°	992	1994	1921
80°	809	1540	1556
85°	651	1024	962



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.7	3.0
10°-20°	336.8	8.7
20°-30°	514.8	13.2
30°-40°	629.6	16.2
40°-50°	673.7	17.3
50°-60°	645.1	16.6
60°-70°	545.7	14.0
70°-80°	345.9	8.9
80°-90°	79.6	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°	968.3	24.9
0°-40°	1597.9	41.1
0°-60°	2916.7	75.0
0°-90°	3887.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3887.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1229	1229	1229	1229	1229	
5°	1231	1225	1227	1225	1223	117
15°	1191	1189	1195	1195	1195	336
25°	1104	1104	1121	1125	1125	510
35°	982	988	1008	1022	1030	614
45°	825	839	872	908	926	636
55°	639	659	723	783	809	570
65°	422	462	560	637	671	415
75°	191	269	384	382	370	207
85°	42	64	66	60	62	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1229.0	1229.0	1229.0	1229.0	1229.0
2.5°	1235.0	1229.0	1231.0	1229.0	1225.0
5°	1231.0	1225.0	1227.0	1225.0	1223.0
7.5°	1227.0	1221.0	1223.0	1221.0	1221.0
10°	1219.0	1212.9	1217.0	1215.0	1212.9
12.5°	1206.9	1202.9	1206.9	1204.9	1204.9
15°	1190.9	1188.8	1194.9	1194.9	1194.9
17.5°	1174.8	1172.8	1180.8	1180.8	1180.8
20°	1154.7	1152.7	1164.8	1164.8	1164.8
22.5°	1130.6	1128.6	1144.7	1144.7	1144.7
25°	1104.5	1104.5	1120.6	1124.6	1124.6
27.5°	1078.4	1078.4	1096.5	1102.5	1102.5
30°	1050.3	1050.3	1068.4	1076.4	1080.4
32.5°	1016.1	1020.2	1040.2	1050.3	1054.3
35°	982.0	988.0	1008.1	1022.2	1030.2
37.5°	945.9	951.9	976.0	992.0	1002.1
40°	907.7	915.7	941.8	961.9	974.0
42.5°	865.5	877.6	907.7	933.8	949.9
45°	825.4	839.4	871.6	907.7	925.8
47.5°	781.2	797.3	833.4	879.6	897.7
50°	735.0	751.1	795.2	847.5	867.5
52.5°	688.8	706.9	759.1	815.3	839.4
55°	638.6	658.7	722.9	783.2	809.3
57.5°	586.4	610.5	682.8	747.0	775.2
60°	532.2	562.3	642.6	710.9	741.0
62.5°	475.9	512.1	602.5	674.8	706.9
65°	421.7	461.9	560.3	636.6	670.7
67.5°	363.5	413.7	518.1	600.4	632.6
70°	305.2	363.5	473.9	558.3	590.4
72.5°	247.0	317.3	429.8	506.1	506.1
75°	190.8	269.1	383.6	381.6	369.5
77.5°	144.6	224.9	315.3	269.1	271.1
80°	104.4	180.7	198.8	198.8	200.8
82.5°	70.3	138.6	128.5	126.5	130.5
85°	42.2	64.3	66.3	60.2	62.3
87.5°	20.1	22.1	18.1	12.0	12.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)