

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: P230456

Luminaire Tested: **24CZ-LD5-65SE-SQP-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230456
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-L930-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH SQP LENS
Light Source: (84) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3740.7 lumens
Efficiency: N/A
Efficacy: 62.3 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

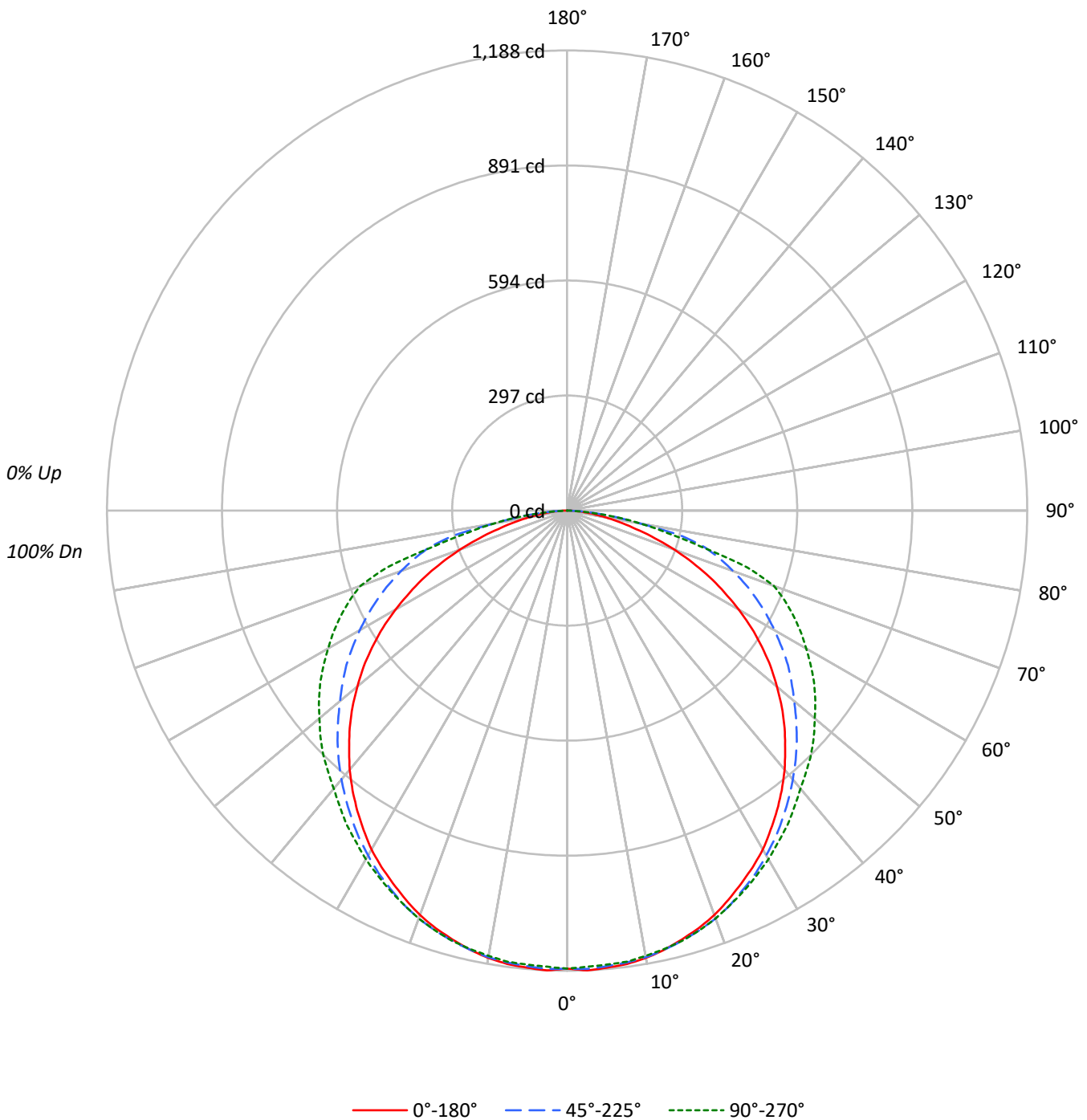
Input Watts (W): 60
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1591	1591	1591
5°	1600	1595	1589
10°	1602	1600	1594
15°	1596	1601	1601
20°	1591	1605	1605
25°	1578	1601	1606
30°	1570	1597	1615
35°	1552	1593	1628
40°	1534	1592	1646
45°	1511	1596	1695
50°	1480	1602	1747
55°	1441	1632	1827
60°	1378	1664	1919
65°	1292	1716	2055
70°	1155	1794	2235
75°	954	1918	1848
80°	779	1482	1497
85°	627	985	925



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.3	3.0
10°-20°	324.1	8.7
20°-30°	495.3	13.2
30°-40°	605.8	16.2
40°-50°	648.2	17.3
50°-60°	620.7	16.6
60°-70°	525.0	14.0
70°-80°	332.8	8.9
80°-90°	76.6	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°	931.7	24.9
0°-40°	1537.4	41.1
0°-60°	2806.3	75.0
0°-90°	3740.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3740.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1182	1182	1182	1182	1182	
5°	1184	1179	1181	1179	1177	113
15°	1146	1144	1150	1150	1150	324
25°	1063	1063	1078	1082	1082	490
35°	945	951	970	984	991	591
45°	794	808	839	873	891	612
55°	614	634	696	754	779	548
65°	406	444	539	612	645	400
75°	184	259	369	367	356	200
85°	41	62	64	58	60	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1182.5	1182.5	1182.5	1182.5	1182.5
2.5°	1188.3	1182.5	1184.4	1182.5	1178.6
5°	1184.4	1178.6	1180.6	1178.6	1176.7
7.5°	1180.6	1174.8	1176.7	1174.8	1174.8
10°	1172.8	1167.0	1170.9	1169.0	1167.0
12.5°	1161.2	1157.4	1161.2	1159.3	1159.3
15°	1145.8	1143.9	1149.7	1149.7	1149.7
17.5°	1130.3	1128.4	1136.1	1136.1	1136.1
20°	1111.0	1109.1	1120.7	1120.7	1120.7
22.5°	1087.8	1085.9	1101.3	1101.3	1101.3
25°	1062.7	1062.7	1078.2	1082.0	1082.0
27.5°	1037.6	1037.6	1055.0	1060.8	1060.8
30°	1010.5	1010.5	1027.9	1035.7	1039.5
32.5°	977.7	981.6	1000.9	1010.5	1014.4
35°	944.8	950.6	970.0	983.5	991.2
37.5°	910.1	915.9	939.0	954.5	964.2
40°	873.3	881.1	906.2	925.5	937.1
42.5°	832.8	844.4	873.3	898.5	913.9
45°	794.1	807.7	838.6	873.3	890.7
47.5°	751.6	767.1	801.9	846.3	863.7
50°	707.2	722.6	765.1	815.4	834.7
52.5°	662.7	680.1	730.4	784.5	807.7
55°	614.4	633.8	695.6	753.6	778.7
57.5°	564.2	587.4	656.9	718.8	745.8
60°	512.0	541.0	618.3	684.0	713.0
62.5°	457.9	492.7	579.7	649.2	680.1
65°	405.8	444.4	539.1	612.5	645.4
67.5°	349.7	398.0	498.5	577.7	608.6
70°	293.7	349.7	456.0	537.1	568.1
72.5°	237.7	305.3	413.5	486.9	486.9
75°	183.6	258.9	369.0	367.1	355.5
77.5°	139.1	216.4	303.4	258.9	260.8
80°	100.5	173.9	191.3	191.3	193.2
82.5°	67.6	133.3	123.7	121.7	125.6
85°	40.6	61.8	63.8	58.0	59.9
87.5°	19.3	21.3	17.4	11.6	11.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)