

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: P230415

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230415
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-LD5-60-SQP-UNV-L950-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH SQP LENS
Light Source: (168) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4044.0 lumens
Efficiency: N/A
Efficacy: 77.5 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

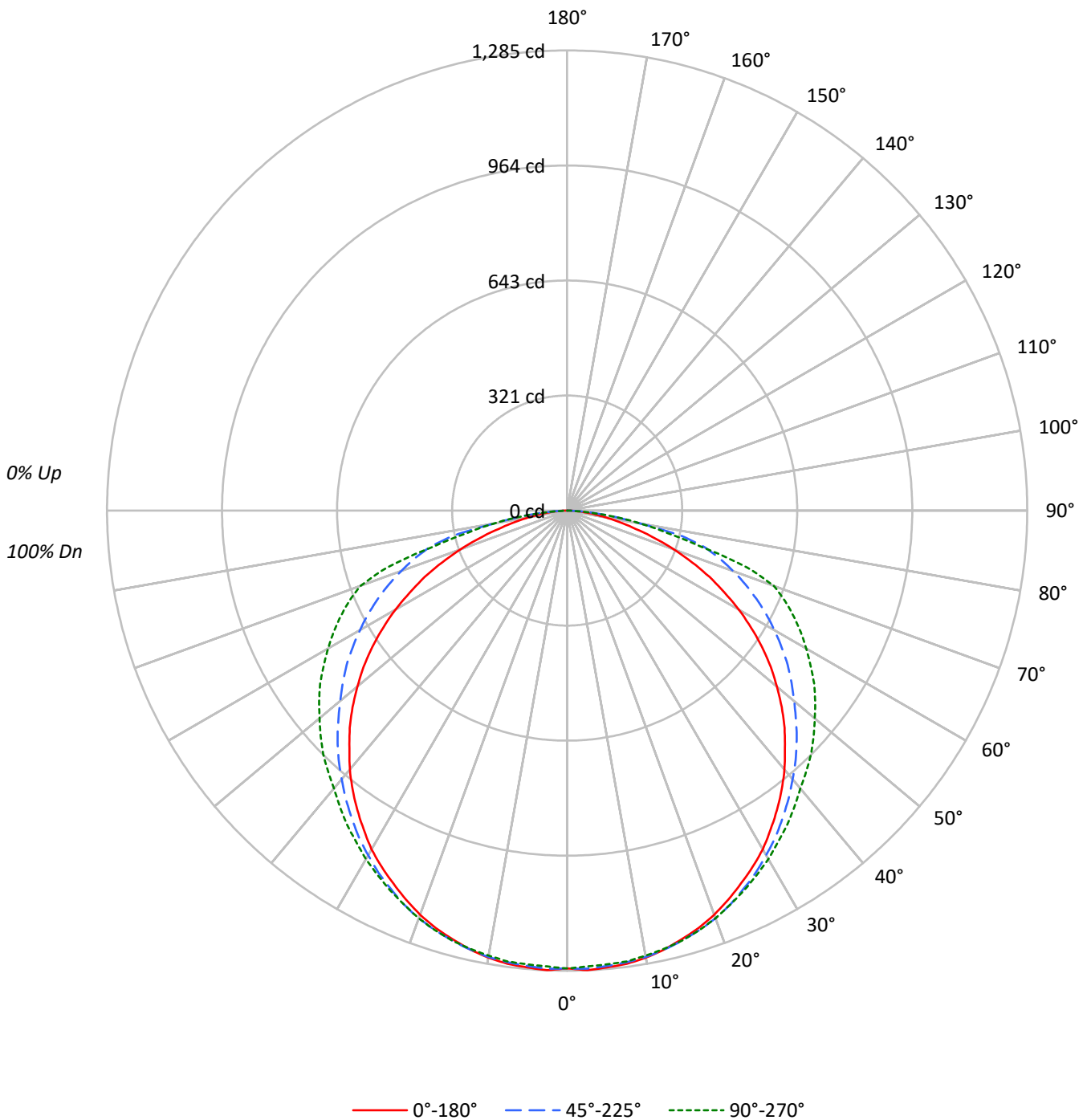
Input Watts (W): 52.17
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1720	1720	1720
5°	1729	1724	1718
10°	1732	1729	1724
15°	1725	1731	1731
20°	1720	1735	1735
25°	1706	1730	1737
30°	1697	1727	1746
35°	1678	1722	1760
40°	1658	1721	1779
45°	1634	1725	1832
50°	1600	1732	1889
55°	1558	1764	1975
60°	1489	1799	2074
65°	1397	1855	2221
70°	1249	1939	2416
75°	1031	2074	1998
80°	841	1602	1619
85°	678	1064	1000



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.4	3.0
10°-20°	350.3	8.7
20°-30°	535.4	13.2
30°-40°	654.9	16.2
40°-50°	700.7	17.3
50°-60°	671.0	16.6
60°-70°	567.6	14.0
70°-80°	359.8	8.9
80°-90°	82.8	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°	1007.2	24.9
0°-40°	1662.1	41.1
0°-60°	3033.8	75.0
0°-90°	4044.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4044.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1278	1278	1278	1278	1278	
5°	1280	1274	1276	1274	1272	122
15°	1239	1237	1243	1243	1243	350
25°	1149	1149	1166	1170	1170	530
35°	1021	1028	1049	1063	1072	639
45°	858	873	907	944	963	661
55°	664	685	752	815	842	592
65°	439	480	583	662	698	432
75°	198	280	399	397	384	216
85°	44	67	69	63	65	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1278.4	1278.4	1278.4	1278.4	1278.4
2.5°	1284.6	1278.4	1280.5	1278.4	1274.2
5°	1280.5	1274.2	1276.3	1274.2	1272.1
7.5°	1276.3	1270.0	1272.1	1270.0	1270.0
10°	1267.9	1261.7	1265.8	1263.7	1261.7
12.5°	1255.4	1251.2	1255.4	1253.3	1253.3
15°	1238.7	1236.6	1242.9	1242.9	1242.9
17.5°	1222.0	1219.9	1228.2	1228.2	1228.2
20°	1201.1	1199.0	1211.5	1211.5	1211.5
22.5°	1176.0	1173.9	1190.6	1190.6	1190.6
25°	1148.9	1148.9	1165.6	1169.7	1169.7
27.5°	1121.7	1121.7	1140.5	1146.8	1146.8
30°	1092.5	1092.5	1111.3	1119.6	1123.8
32.5°	1056.9	1061.1	1082.0	1092.5	1096.6
35°	1021.4	1027.7	1048.6	1063.2	1071.6
37.5°	983.8	990.1	1015.2	1031.9	1042.3
40°	944.2	952.5	979.7	1000.6	1013.1
42.5°	900.3	912.8	944.2	971.3	988.0
45°	858.5	873.1	906.6	944.2	963.0
47.5°	812.6	829.3	866.9	914.9	933.7
50°	764.5	781.2	827.2	881.5	902.4
52.5°	716.5	735.3	789.6	848.1	873.1
55°	664.2	685.1	752.0	814.6	841.8
57.5°	609.9	635.0	710.2	777.0	806.3
60°	553.5	584.9	668.4	739.4	770.8
62.5°	495.1	532.7	626.7	701.8	735.3
65°	438.7	480.4	582.8	662.2	697.7
67.5°	378.1	430.3	538.9	624.6	658.0
70°	317.5	378.1	493.0	580.7	614.1
72.5°	256.9	330.0	447.0	526.4	526.4
75°	198.4	279.9	399.0	396.9	384.3
77.5°	150.4	233.9	327.9	279.9	282.0
80°	108.6	188.0	206.8	206.8	208.9
82.5°	73.1	144.1	133.7	131.6	135.8
85°	43.9	66.8	68.9	62.7	64.8
87.5°	20.9	23.0	18.8	12.5	12.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)