

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: P230619

Luminaire Tested: **22CZ-LD5-44SE-S-UNV-L950-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230619
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25712)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-44SE-S-UNV-L950-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH SMOOTH LENS
Light Source: (56) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4284.0 lumens
Efficiency: N/A
Efficacy: 107.1 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.24 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

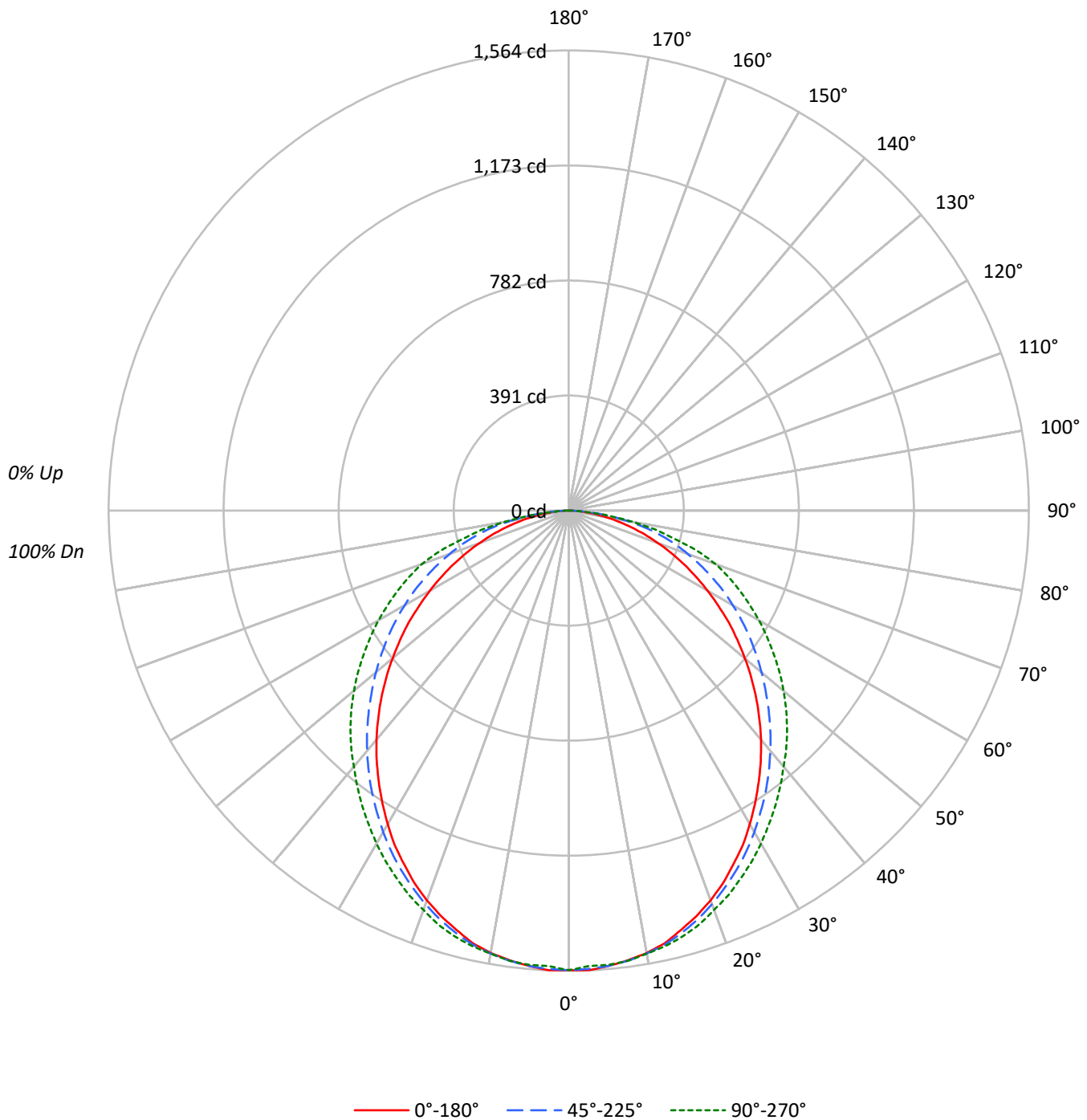
Input Watts (W): 40
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	109	104	99	95	106	101	97	94		97	94	91		93	91	88		90	87	85
2	99	90	83	77	96	88	82	77		85	79	75		81	77	73		78	75	71
3	90	79	71	64	87	78	70	64		75	68	63		72	66	62		69	64	60
4	82	70	61	54	80	69	61	54		66	59	53		64	58	53		62	56	52
5	76	63	54	47	74	62	53	47		59	52	46		57	51	46		56	50	45
6	70	56	47	41	68	56	47	41		54	46	40		52	45	40		50	44	40
7	65	51	42	36	63	50	42	36		49	41	36		47	41	36		46	40	35
8	60	47	38	32	59	46	38	32		45	37	32		43	37	32		42	36	32
9	56	43	35	29	55	42	34	29		41	34	29		40	34	29		39	33	29
10	53	40	32	26	52	39	32	26		38	31	26		37	31	26		36	30	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4203	4203	4203
5°	4196	4196	4185
10°	4172	4177	4177
15°	4110	4139	4173
20°	4036	4078	4137
25°	3934	4002	4100
30°	3824	3920	4060
35°	3697	3833	4022
40°	3571	3744	3990
45°	3430	3657	3994
50°	3273	3584	3988
55°	3118	3523	3987
60°	2935	3467	4020
65°	2751	3420	4074
70°	2542	3384	4177
75°	2289	3359	3872
80°	2008	3126	3380
85°	1652	2350	2096



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.5	3.4
10°-20°	419.0	9.8
20°-30°	622.3	14.5
30°-40°	732.5	17.1
40°-50°	746.7	17.4
50°-60°	673.5	15.7
60°-70°	530.5	12.4
70°-80°	327.2	7.6
80°-90°	84.9	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°	1188.7	27.7
0°-40°	1921.2	44.8
0°-60°	3341.3	78.0
0°-90°	4284.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4284.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1562	1562	1562	1562	1562	
5°	1554	1556	1554	1552	1549	147
15°	1475	1482	1486	1494	1498	416
25°	1325	1333	1348	1370	1381	611
35°	1126	1138	1167	1204	1224	704
45°	901	916	961	1018	1049	695
55°	665	687	751	819	850	593
65°	432	463	537	605	640	428
75°	220	257	323	360	372	235
85°	54	68	76	72	68	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1561.8	1561.8	1561.8	1561.8	1561.8
2.5°	1563.8	1563.8	1559.7	1555.6	1549.4
5°	1553.5	1555.6	1553.5	1551.5	1549.4
7.5°	1541.2	1543.3	1543.3	1543.3	1543.3
10°	1526.8	1528.8	1528.8	1528.8	1528.8
12.5°	1506.2	1508.3	1510.3	1512.4	1516.5
15°	1475.3	1481.5	1485.6	1493.9	1498.0
17.5°	1444.5	1450.7	1456.8	1467.1	1475.3
20°	1409.5	1413.6	1423.9	1436.3	1444.5
22.5°	1370.4	1376.6	1386.9	1403.3	1415.7
25°	1325.1	1333.4	1347.8	1370.4	1380.7
27.5°	1281.9	1288.1	1306.6	1331.3	1345.7
30°	1230.5	1238.7	1261.4	1292.2	1306.6
32.5°	1179.0	1189.3	1214.0	1249.0	1265.5
35°	1125.5	1137.9	1166.7	1203.7	1224.3
37.5°	1072.0	1084.4	1117.3	1158.5	1181.1
40°	1016.5	1028.8	1065.9	1111.1	1135.8
42.5°	958.9	973.3	1014.4	1065.9	1094.7
45°	901.3	915.7	960.9	1018.5	1049.4
47.5°	841.6	858.0	907.4	971.2	1002.1
50°	781.9	800.4	856.0	921.8	952.7
52.5°	722.2	742.8	802.5	870.4	903.3
55°	664.6	687.3	751.0	819.0	849.8
57.5°	602.9	629.6	697.6	763.4	798.4
60°	545.3	574.1	644.1	709.9	746.9
62.5°	487.7	518.5	592.6	658.5	693.4
65°	432.1	463.0	537.1	605.0	639.9
67.5°	376.6	411.5	483.6	551.5	586.4
70°	323.1	360.1	430.1	495.9	530.9
72.5°	271.6	308.7	378.6	440.3	460.9
75°	220.2	257.2	323.1	360.1	372.4
77.5°	172.8	207.8	265.4	288.1	304.5
80°	129.6	160.5	201.7	216.1	218.1
82.5°	88.5	115.2	139.9	142.0	139.9
85°	53.5	67.9	76.1	72.0	67.9
87.5°	24.7	26.7	24.7	16.5	10.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)