

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: P230597

Luminaire Tested: **22CZ-LD5-44-S-UNV-L935-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230597
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-LD5-44-S-UNV-L935-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH SMOOTH LENS
Light Source: (84) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3893.0 lumens
Efficiency: N/A
Efficacy: 93.1 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

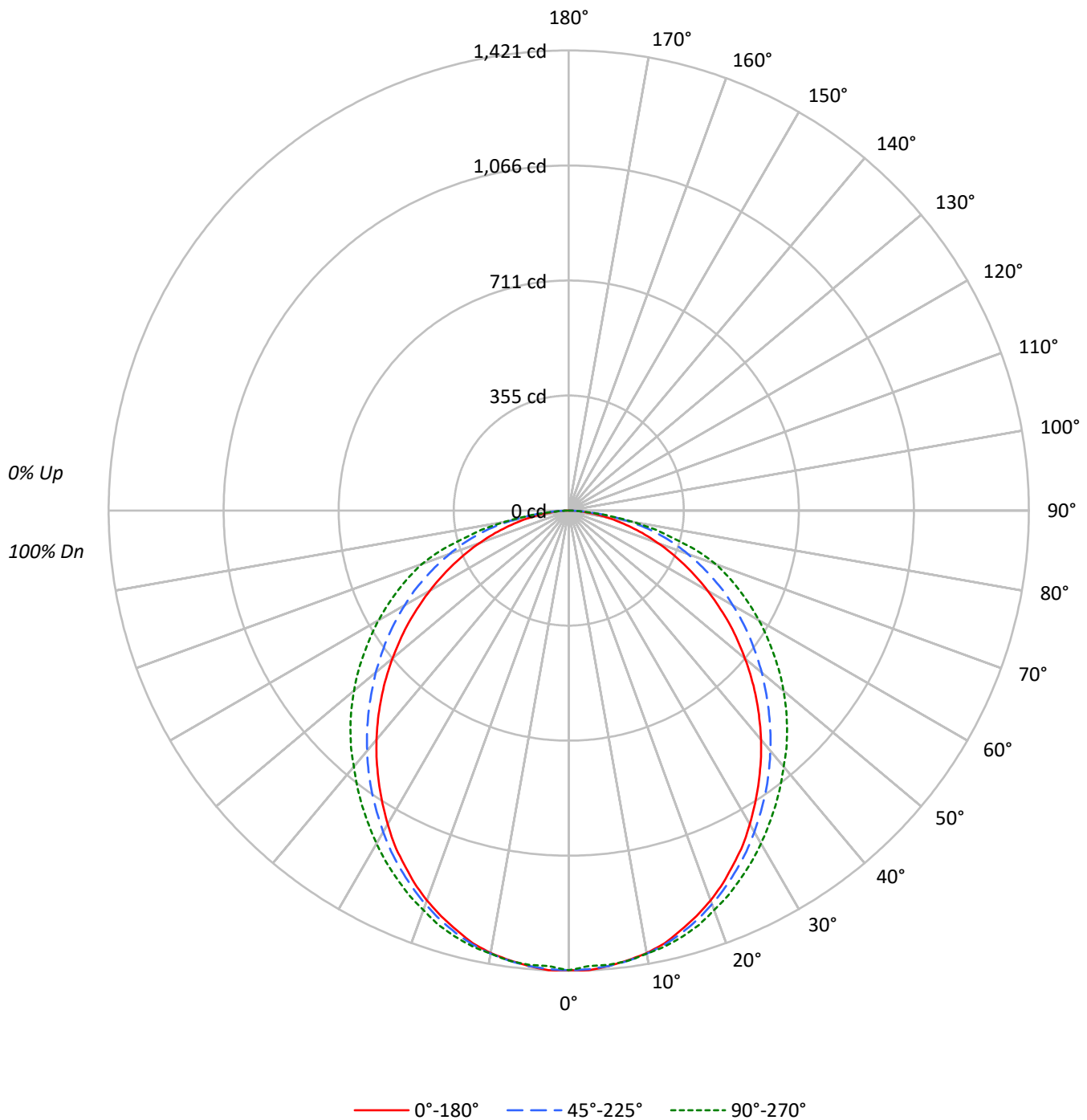
Input Watts (W): 41.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83		
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69		
3	90	79	71	64	87	78	70	64	75	68	63	72	66	62	69	64	60	58		
4	82	70	61	54	80	69	61	54	66	59	53	64	58	53	62	56	52	50		
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43		
6	70	56	47	41	68	56	47	41	54	46	40	52	45	40	50	44	40	38		
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33		
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30		
9	56	43	35	29	55	42	34	29	41	34	29	40	34	29	39	33	29	27		
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26	36	30	26	24		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3819	3819	3819
5°	3813	3813	3803
10°	3791	3796	3796
15°	3735	3761	3792
20°	3668	3705	3759
25°	3575	3637	3725
30°	3475	3562	3690
35°	3360	3483	3655
40°	3245	3403	3626
45°	3117	3323	3629
50°	2974	3257	3624
55°	2834	3202	3623
60°	2667	3150	3653
65°	2500	3107	3703
70°	2310	3075	3795
75°	2080	3053	3518
80°	1826	2839	3071
85°	1501	2137	1905



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.0	3.4
10°-20°	380.7	9.8
20°-30°	565.5	14.5
30°-40°	665.6	17.1
40°-50°	678.6	17.4
50°-60°	612.0	15.7
60°-70°	482.1	12.4
70°-80°	297.4	7.6
80°-90°	77.2	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°	1080.2	27.7
0°-40°	1745.8	44.8
0°-60°	3036.4	78.0
0°-90°	3893.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3893.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1419	1419	1419	1419	1419	
5°	1412	1414	1412	1410	1408	134
15°	1341	1346	1350	1358	1361	378
25°	1204	1212	1225	1245	1255	555
35°	1023	1034	1060	1094	1113	640
45°	819	832	873	926	954	631
55°	604	624	682	744	772	539
65°	393	421	488	550	582	389
75°	200	234	294	327	338	213
85°	49	62	69	65	62	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1419.2	1419.2	1419.2	1419.2	1419.2
2.5°	1421.1	1421.1	1417.4	1413.6	1408.0
5°	1411.7	1413.6	1411.7	1409.9	1408.0
7.5°	1400.5	1402.4	1402.4	1402.4	1402.4
10°	1387.4	1389.3	1389.3	1389.3	1389.3
12.5°	1368.7	1370.6	1372.5	1374.4	1378.1
15°	1340.7	1346.3	1350.0	1357.5	1361.3
17.5°	1312.6	1318.3	1323.9	1333.2	1340.7
20°	1280.9	1284.6	1293.9	1305.2	1312.6
22.5°	1245.3	1250.9	1260.3	1275.2	1286.5
25°	1204.2	1211.7	1224.8	1245.3	1254.7
27.5°	1164.9	1170.5	1187.4	1209.8	1222.9
30°	1118.2	1125.7	1146.2	1174.3	1187.4
32.5°	1071.4	1080.8	1103.2	1135.0	1150.0
35°	1022.8	1034.0	1060.2	1093.9	1112.6
37.5°	974.2	985.4	1015.3	1052.7	1073.3
40°	923.7	934.9	968.6	1009.7	1032.2
42.5°	871.4	884.4	921.8	968.6	994.8
45°	819.0	832.1	873.2	925.6	953.6
47.5°	764.8	779.7	824.6	882.6	910.6
50°	710.5	727.4	777.9	837.7	865.7
52.5°	656.3	675.0	729.2	791.0	820.9
55°	604.0	624.5	682.5	744.2	772.3
57.5°	547.9	572.2	633.9	693.7	725.5
60°	495.5	521.7	585.3	645.1	678.8
62.5°	443.2	471.2	538.5	598.4	630.1
65°	392.7	420.7	488.0	549.7	581.5
67.5°	342.2	374.0	439.4	501.1	532.9
70°	293.6	327.2	390.8	450.6	482.4
72.5°	246.8	280.5	344.1	400.2	418.9
75°	200.1	233.7	293.6	327.2	338.4
77.5°	157.1	188.9	241.2	261.8	276.7
80°	117.8	145.8	183.2	196.3	198.2
82.5°	80.4	104.7	127.2	129.0	127.2
85°	48.6	61.7	69.2	65.4	61.7
87.5°	22.4	24.3	22.4	15.0	9.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)