

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: P230802

Luminaire Tested: **22CZ-LD5-24-SQP-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230802
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25713)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-24-SQP-UNV-L940-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH SQP LENS
Light Source: (84) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1505.0 lumens
Efficiency: N/A
Efficacy: 76.8 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.31 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

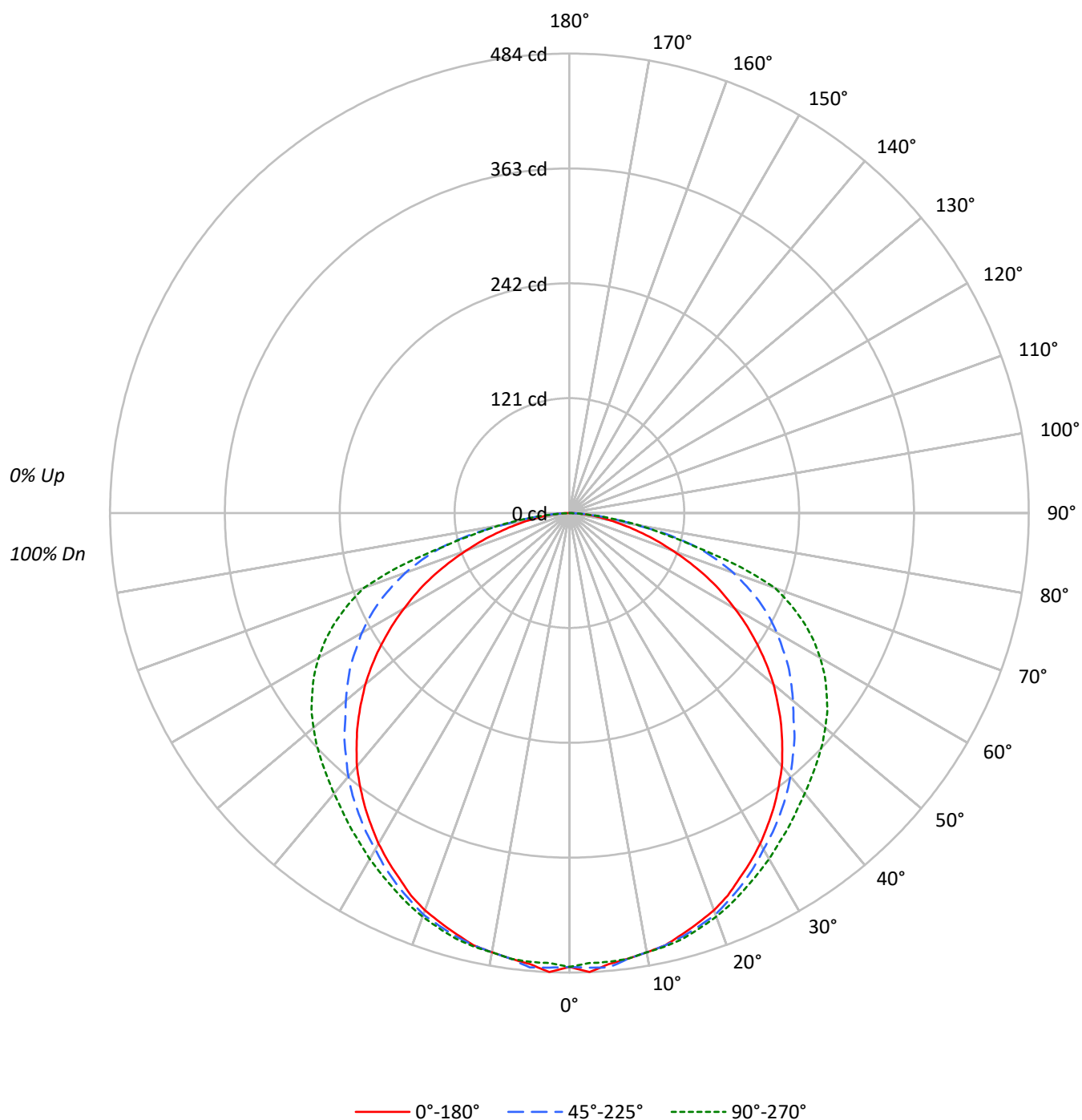
Input Watts (W): 19.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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		100
1	108	103	99	95	105	101	97	93	97	93	90		93	90	87		83
2	98	89	82	76	95	87	81	75	84	78	73		80	76	71		68
3	89	78	69	62	86	76	68	62	73	66	61		70	64	59		56
4	81	68	59	52	79	67	58	52	64	57	51		62	56	50		47
5	74	61	52	45	72	60	51	44	58	50	44		56	49	43		41
6	68	55	45	39	66	54	45	39	52	44	38		50	43	38		35
7	63	49	40	34	62	49	40	34	47	39	34		45	39	33		31
8	59	45	36	30	57	44	36	30	43	35	30		42	35	30		28
9	55	41	33	27	54	41	33	27	39	32	27		38	32	27		25
10	51	38	30	24	50	37	30	24	36	29	24		35	29	24		22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1286	1286	1286
5°	1288	1298	1282
10°	1284	1284	1284
15°	1280	1286	1293
20°	1275	1289	1295
25°	1260	1281	1298
30°	1249	1271	1308
35°	1236	1271	1325
40°	1224	1273	1355
45°	1201	1276	1405
50°	1174	1287	1473
55°	1135	1322	1552
60°	1082	1359	1641
65°	1019	1407	1734
70°	910	1444	1811
75°	790	1446	1434
80°	669	1069	1159
85°	577	722	648



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.4	3.0
10°-20°	130.3	8.7
20°-30°	198.6	13.2
30°-40°	243.0	16.1
40°-50°	261.5	17.4
50°-60°	253.3	16.8
60°-70°	214.6	14.3
70°-80°	129.7	8.6
80°-90°	28.5	1.9
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°	374.4	24.9
0°-40°	617.4	41.0
0°-60°	1132.2	75.2
0°-90°	1505.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1505.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	478	478	478	478	478	
5°	477	477	480	478	474	45
15°	459	460	462	463	464	130
25°	424	427	431	435	437	196
35°	376	379	387	397	403	235
45°	316	321	335	356	369	243
55°	242	252	282	314	331	216
65°	160	178	221	256	272	158
75°	76	103	139	141	138	82
85°	19	22	23	22	21	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	478.0	478.0	478.0	478.0	478.0
2.5°	483.9	482.7	479.2	476.9	474.5
5°	476.9	476.9	480.4	478.0	474.5
7.5°	473.4	473.4	473.4	479.2	473.4
10°	469.8	471.0	469.8	474.5	469.8
12.5°	466.3	466.3	466.3	467.5	467.5
15°	459.3	460.5	461.7	462.8	464.0
17.5°	452.3	453.5	455.8	457.0	458.2
20°	445.3	446.5	450.0	450.0	452.3
22.5°	436.0	436.0	440.6	441.8	445.3
25°	424.3	426.6	431.3	434.8	437.1
27.5°	413.7	416.1	420.8	425.4	428.9
30°	402.1	404.4	409.1	416.1	420.8
32.5°	389.2	391.5	398.6	406.7	411.4
35°	376.3	378.7	386.9	397.4	403.2
37.5°	362.3	365.8	375.2	386.9	393.9
40°	348.3	351.8	362.3	375.2	385.7
42.5°	331.9	336.6	348.3	365.8	377.5
45°	315.6	321.4	335.4	356.5	369.3
47.5°	298.0	303.9	320.2	347.1	361.2
50°	280.5	287.5	307.4	336.6	351.8
52.5°	261.8	268.8	294.5	326.1	342.5
55°	241.9	252.5	281.7	314.4	330.8
57.5°	222.1	233.8	266.5	301.5	319.1
60°	201.0	215.1	252.5	287.5	305.0
62.5°	181.2	196.4	237.3	272.3	289.9
65°	160.1	177.7	220.9	256.0	272.3
67.5°	137.9	160.1	202.2	236.1	252.5
70°	115.7	141.4	183.5	215.1	230.2
72.5°	95.8	122.7	162.5	189.3	189.3
75°	76.0	102.9	139.1	141.4	137.9
77.5°	58.4	84.2	108.7	99.3	101.7
80°	43.2	64.3	69.0	72.5	74.8
82.5°	29.2	43.2	44.4	46.8	46.8
85°	18.7	22.2	23.4	22.2	21.0
87.5°	8.2	9.4	7.0	4.7	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)