

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: P230826

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230826
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-LD5-24SE-SQP-UNV-L940-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH SQP LENS
Light Source: (56) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1504.0 lumens
Efficiency: N/A
Efficacy: 71.3 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

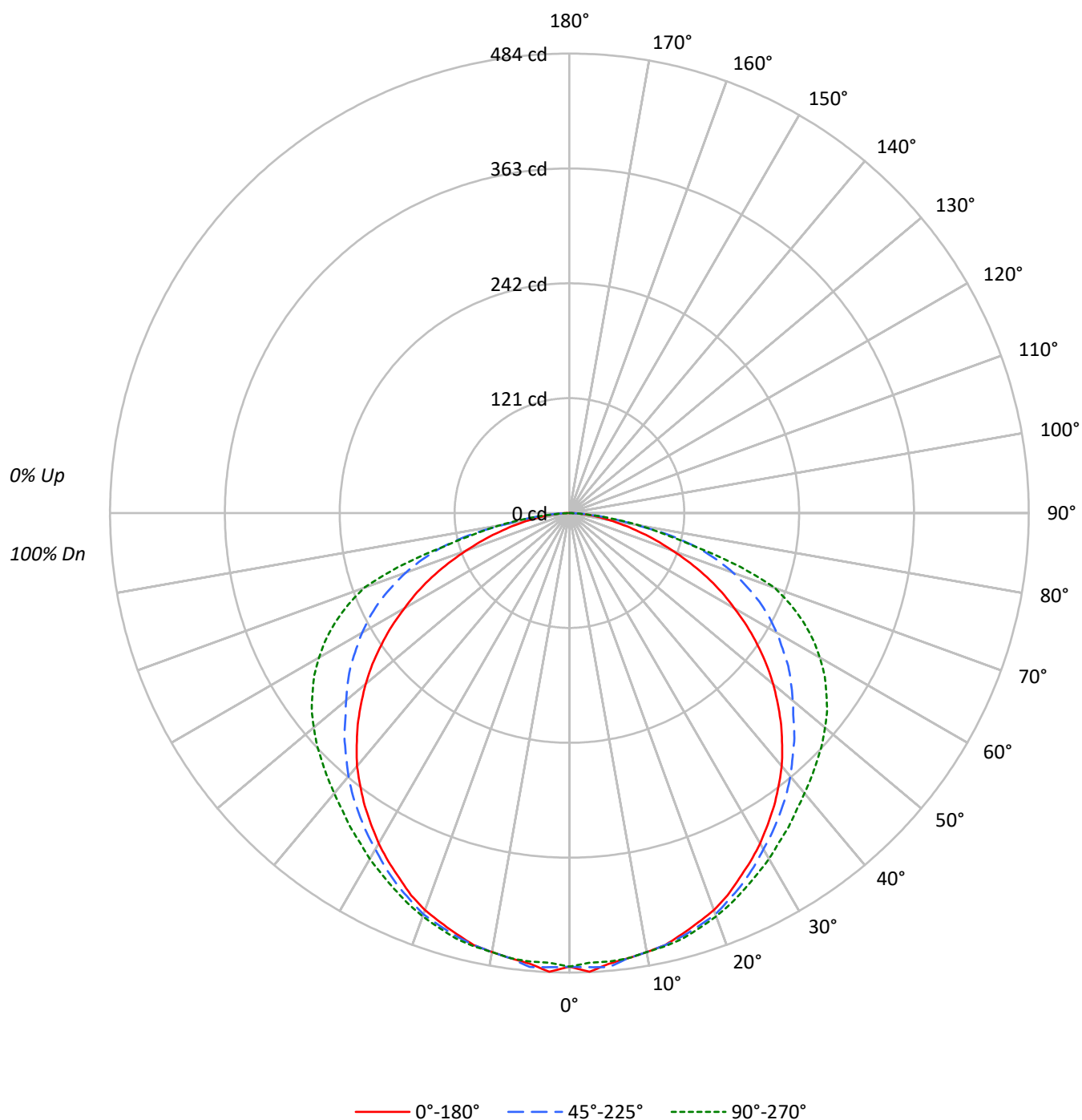
Input Watts (W): 21.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	99	95	105	101	97	93		97	93	90		93	90	87		89	87	85
2	98	89	82	76	95	87	81	75		84	78	73		80	76	71		77	73	70
3	89	78	69	62	86	76	68	62		73	66	61		70	64	59		68	63	58
4	81	68	59	52	79	67	58	52		64	57	51		62	56	50		60	54	50
5	74	61	52	45	72	60	51	44		58	50	44		56	49	43		54	48	43
6	68	55	45	39	66	54	45	39		52	44	38		50	43	38		48	42	37
7	63	49	40	34	62	49	40	34		47	39	34		45	39	33		44	38	33
8	59	45	36	30	57	44	36	30		43	35	30		42	35	30		40	34	29
9	55	41	33	27	54	41	33	27		39	32	27		38	32	27		37	31	27
10	51	38	30	24	50	37	30	24		36	29	24		35	29	24		35	28	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1285	1285	1285
5°	1287	1297	1281
10°	1283	1283	1283
15°	1279	1285	1292
20°	1274	1288	1294
25°	1259	1280	1297
30°	1249	1270	1307
35°	1236	1270	1324
40°	1223	1272	1354
45°	1200	1276	1405
50°	1173	1286	1472
55°	1134	1321	1551
60°	1081	1358	1640
65°	1019	1406	1733
70°	910	1443	1810
75°	789	1445	1433
80°	669	1068	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°	198.5	13.2
30°-40°	242.9	16.1
40°-50°	261.3	17.4
50°-60°	253.1	16.8
60°-70°	214.4	14.3
70°-80°	129.6	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°	374.1	24.9
0°-40°	617.0	41.0
0°-60°	1131.5	75.2
0°-90°	1504.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1504.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	478	478	478	478	478	
5°	476	476	480	478	474	45
15°	459	460	461	462	464	130
25°	424	426	431	434	437	196
35°	376	378	387	397	403	235
45°	315	321	335	356	369	243
55°	242	252	282	314	330	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°	477.7	477.7	477.7	477.7	477.7
2.5°	483.6	482.4	478.9	476.5	474.2
5°	476.5	476.5	480.0	477.7	474.2
7.5°	473.0	473.0	473.0	478.9	473.0
10°	469.5	470.7	469.5	474.2	469.5
12.5°	466.0	466.0	466.0	467.2	467.2
15°	459.0	460.2	461.4	462.5	463.7
17.5°	452.0	453.2	455.5	456.7	457.9
20°	445.0	446.2	449.7	449.7	452.0
22.5°	435.7	435.7	440.3	441.5	445.0
25°	424.0	426.3	431.0	434.5	436.8
27.5°	413.5	415.8	420.5	425.2	428.7
30°	401.8	404.1	408.8	415.8	420.5
32.5°	388.9	391.3	398.3	406.5	411.1
35°	376.1	378.4	386.6	397.1	403.0
37.5°	362.1	365.6	374.9	386.6	393.6
40°	348.1	351.6	362.1	374.9	385.4
42.5°	331.7	336.4	348.1	365.6	377.3
45°	315.4	321.2	335.2	356.2	369.1
47.5°	297.8	303.7	320.0	346.9	360.9
50°	280.3	287.3	307.2	336.4	351.6
52.5°	261.6	268.6	294.3	325.9	342.2
55°	241.8	252.3	281.5	314.2	330.5
57.5°	221.9	233.6	266.3	301.3	318.9
60°	200.9	214.9	252.3	287.3	304.8
62.5°	181.0	196.2	237.1	272.1	289.7
65°	160.0	177.5	220.8	255.8	272.1
67.5°	137.8	160.0	202.1	235.9	252.3
70°	115.6	141.3	183.4	214.9	230.1
72.5°	95.8	122.6	162.4	189.2	189.2
75°	75.9	102.8	139.0	141.3	137.8
77.5°	58.4	84.1	108.6	99.3	101.6
80°	43.2	64.2	68.9	72.4	74.8
82.5°	29.2	43.2	44.4	46.7	46.7
85°	18.7	22.2	23.4	22.2	21.0
87.5°	8.2	9.3	7.0	4.7	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)