

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: P230868

Luminaire Tested: **22CZ-LD5-24SE-RDP-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230868
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25714)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-24SE-RDP-UNV-L930-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH RDP LENS
Light Source: (56) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1346.0 lumens
Efficiency: N/A
Efficacy: 63.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

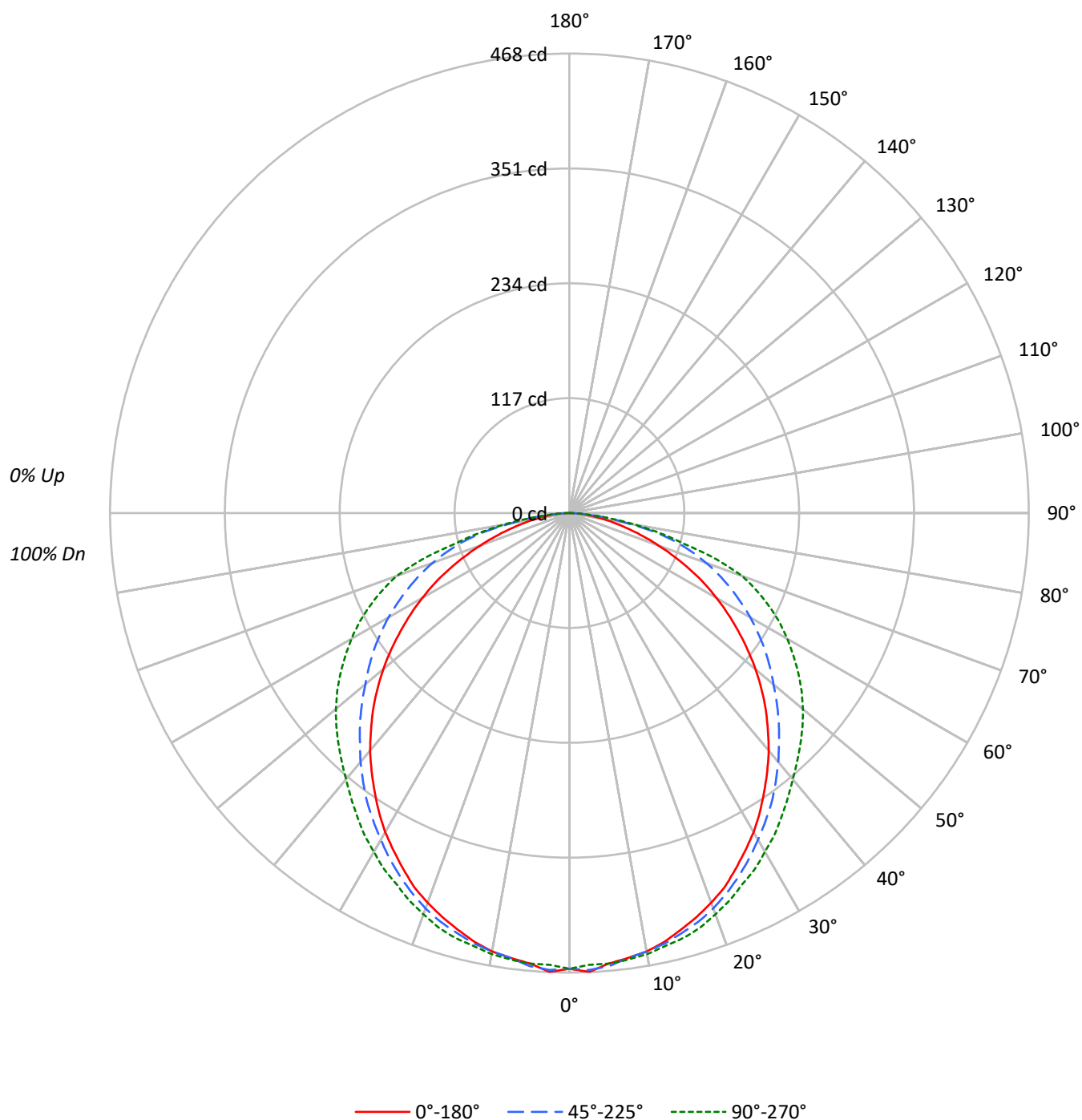
Input Watts (W): 21.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
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	104	99	95	106	101	97	94		97	94	91		93	90	88		89	87	85
2	98	90	83	77	96	88	81	76		84	79	74		81	77	73		78	74	71
3	89	79	70	64	87	77	69	63		74	67	62		71	66	61		69	64	60
4	82	69	60	54	79	68	60	53		66	58	52		63	57	52		61	56	51
5	75	62	53	46	73	61	52	46		59	51	45		57	50	45		55	49	44
6	69	56	47	40	67	55	46	40		53	45	40		51	44	39		50	44	39
7	64	50	42	35	62	50	41	35		48	40	35		47	40	35		45	39	34
8	60	46	37	31	58	45	37	31		44	37	31		43	36	31		42	35	31
9	56	42	34	28	54	42	34	28		40	33	28		39	33	28		38	32	28
10	52	39	31	26	51	38	31	26		37	30	25		36	30	25		36	30	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1249	1249	1249
5°	1244	1251	1244
10°	1239	1239	1246
15°	1224	1234	1248
20°	1209	1227	1245
25°	1188	1212	1238
30°	1166	1194	1238
35°	1137	1181	1239
40°	1110	1163	1244
45°	1077	1148	1266
50°	1037	1137	1300
55°	987	1141	1336
60°	931	1146	1380
65°	859	1152	1429
70°	761	1166	1473
75°	646	1162	1255
80°	536	934	1044
85°	466	630	602



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.8	3.3
10°-20°	125.1	9.3
20°-30°	188.1	14.0
30°-40°	225.5	16.8
40°-50°	235.1	17.5
50°-60°	218.9	16.3
60°-70°	177.7	13.2
70°-80°	107.1	8.0
80°-90°	24.6	1.8
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°	357.1	26.5
0°-40°	582.5	43.3
0°-60°	1036.6	77.0
0°-90°	1346.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1346.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	464	464	464	464	464	
5°	460	460	463	464	460	44
15°	439	441	443	445	448	124
25°	400	403	408	414	417	184
35°	346	350	359	370	377	217
45°	283	288	302	321	333	218
55°	210	219	243	270	285	188
65°	135	149	181	209	224	133
75°	62	82	112	119	121	67
85°	15	19	20	20	20	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	464.1	464.1	464.1	464.1	464.1
2.5°	467.6	466.7	465.8	463.2	460.5
5°	460.5	460.5	463.2	464.1	460.5
7.5°	457.0	457.0	457.0	460.5	458.7
10°	453.4	453.4	453.4	456.1	456.1
12.5°	447.2	448.1	449.0	449.9	451.6
15°	439.2	441.0	442.8	445.4	448.1
17.5°	431.2	433.0	436.5	439.2	442.8
20°	422.3	424.1	428.6	431.2	434.8
22.5°	412.6	413.5	418.8	422.3	426.8
25°	400.2	402.8	408.2	413.5	417.0
27.5°	387.7	390.4	396.6	403.7	409.0
30°	375.3	378.0	384.2	393.1	398.4
32.5°	361.1	364.7	371.8	382.4	388.6
35°	346.0	350.5	359.4	370.0	377.1
37.5°	331.0	335.4	345.2	358.5	365.6
40°	315.9	320.3	331.0	345.2	354.0
42.5°	299.0	304.3	315.9	332.7	343.4
45°	283.0	288.4	301.7	321.2	332.7
47.5°	265.3	271.5	286.6	308.8	322.1
50°	247.6	254.7	271.5	296.4	310.5
52.5°	228.9	236.9	257.3	283.0	298.1
55°	210.3	219.2	243.1	269.7	284.8
57.5°	191.7	201.4	228.0	255.5	270.6
60°	173.0	183.7	212.9	241.3	256.4
62.5°	154.4	165.9	197.0	225.4	241.3
65°	134.9	149.1	181.0	209.4	224.5
67.5°	115.3	132.2	165.0	192.5	206.7
70°	96.7	115.3	148.2	173.9	187.2
72.5°	79.0	98.5	130.4	152.6	157.9
75°	62.1	82.5	111.8	118.9	120.7
77.5°	47.9	66.5	88.7	90.5	94.9
80°	34.6	50.6	60.3	65.7	67.4
82.5°	24.0	34.6	39.9	40.8	41.7
85°	15.1	18.6	20.4	19.5	19.5
87.5°	8.0	7.1	6.2	4.4	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)