

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: P230428

Luminaire Tested: **24CZ-LD5-30SE-SQP-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230428
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25695)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-30SE-SQP-UNV-L930-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH SQP LENS
Light Source: (84) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1749.1 lumens
Efficiency: N/A
Efficacy: 74.4 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.42
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

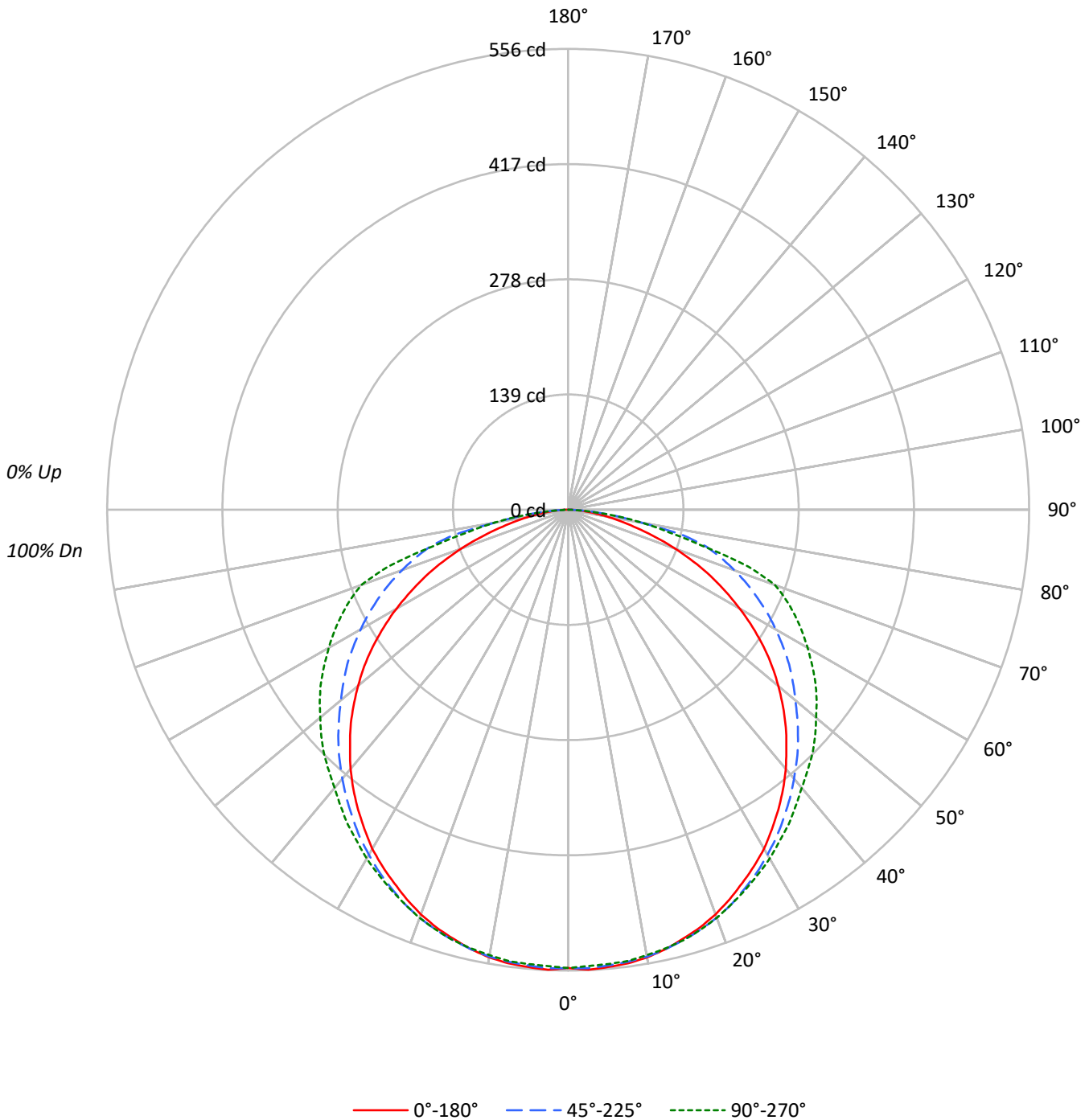
Input Watts (W): 23.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	101	97	93	96	93	90	92	90	87	89	87	84
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	67	63	58
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43
6	68	55	45	39	66	54	45	38	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°	744	744	744
5°	748	746	743
10°	749	748	746
15°	746	749	749
20°	744	750	750
25°	738	748	751
30°	734	747	755
35°	726	745	761
40°	717	744	770
45°	707	746	793
50°	692	749	817
55°	674	763	854
60°	644	778	897
65°	604	803	961
70°	540	839	1045
75°	446	897	864
80°	364	693	700
85°	293	460	432



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.5	3.0
10°-20°	151.5	8.7
20°-30°	231.6	13.2
30°-40°	283.2	16.2
40°-50°	303.1	17.3
50°-60°	290.2	16.6
60°-70°	245.5	14.0
70°-80°	155.6	8.9
80°-90°	35.8	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°	435.6	24.9
0°-40°	718.9	41.1
0°-60°	1312.2	75.0
0°-90°	1749.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1749.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	553	553	553	553	553	
5°	554	551	552	551	550	53
15°	536	535	538	538	538	151
25°	497	497	504	506	506	229
35°	442	444	454	460	464	276
45°	371	378	392	408	416	286
55°	287	296	325	352	364	256
65°	190	208	252	286	302	187
75°	86	121	173	172	166	93
85°	19	29	30	27	28	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	552.9	552.9	552.9	552.9	552.9
2.5°	555.6	552.9	553.8	552.9	551.1
5°	553.8	551.1	552.0	551.1	550.2
7.5°	552.0	549.3	550.2	549.3	549.3
10°	548.4	545.7	547.5	546.6	545.7
12.5°	543.0	541.2	543.0	542.1	542.1
15°	535.8	534.9	537.6	537.6	537.6
17.5°	528.5	527.6	531.2	531.2	531.2
20°	519.5	518.6	524.0	524.0	524.0
22.5°	508.7	507.8	515.0	515.0	515.0
25°	496.9	496.9	504.1	505.9	505.9
27.5°	485.2	485.2	493.3	496.0	496.0
30°	472.5	472.5	480.6	484.3	486.1
32.5°	457.2	459.0	468.0	472.5	474.3
35°	441.8	444.5	453.5	459.9	463.5
37.5°	425.5	428.2	439.1	446.3	450.8
40°	408.4	412.0	423.7	432.8	438.2
42.5°	389.4	394.8	408.4	420.1	427.3
45°	371.3	377.7	392.1	408.4	416.5
47.5°	351.5	358.7	374.9	395.7	403.9
50°	330.7	337.9	357.8	381.3	390.3
52.5°	309.9	318.0	341.5	366.8	377.7
55°	287.3	296.3	325.3	352.4	364.1
57.5°	263.8	274.7	307.2	336.1	348.7
60°	239.4	253.0	289.1	319.8	333.4
62.5°	214.1	230.4	271.0	303.6	318.0
65°	189.7	207.8	252.1	286.4	301.8
67.5°	163.5	186.1	233.1	270.1	284.6
70°	137.3	163.5	213.2	251.2	265.6
72.5°	111.1	142.7	193.3	227.7	227.7
75°	85.8	121.1	172.6	171.7	166.2
77.5°	65.1	101.2	141.8	121.1	122.0
80°	47.0	81.3	89.4	89.4	90.3
82.5°	31.6	62.3	57.8	56.9	58.7
85°	19.0	28.9	29.8	27.1	28.0
87.5°	9.0	9.9	8.1	5.4	5.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)