

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: P230429

Luminaire Tested: **24CZ-LD5-30SE-SQP-UNV-L935-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230429
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-L935-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH SQP LENS
Light Source: (84) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1818.2 lumens
Efficiency: N/A
Efficacy: 77.4 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

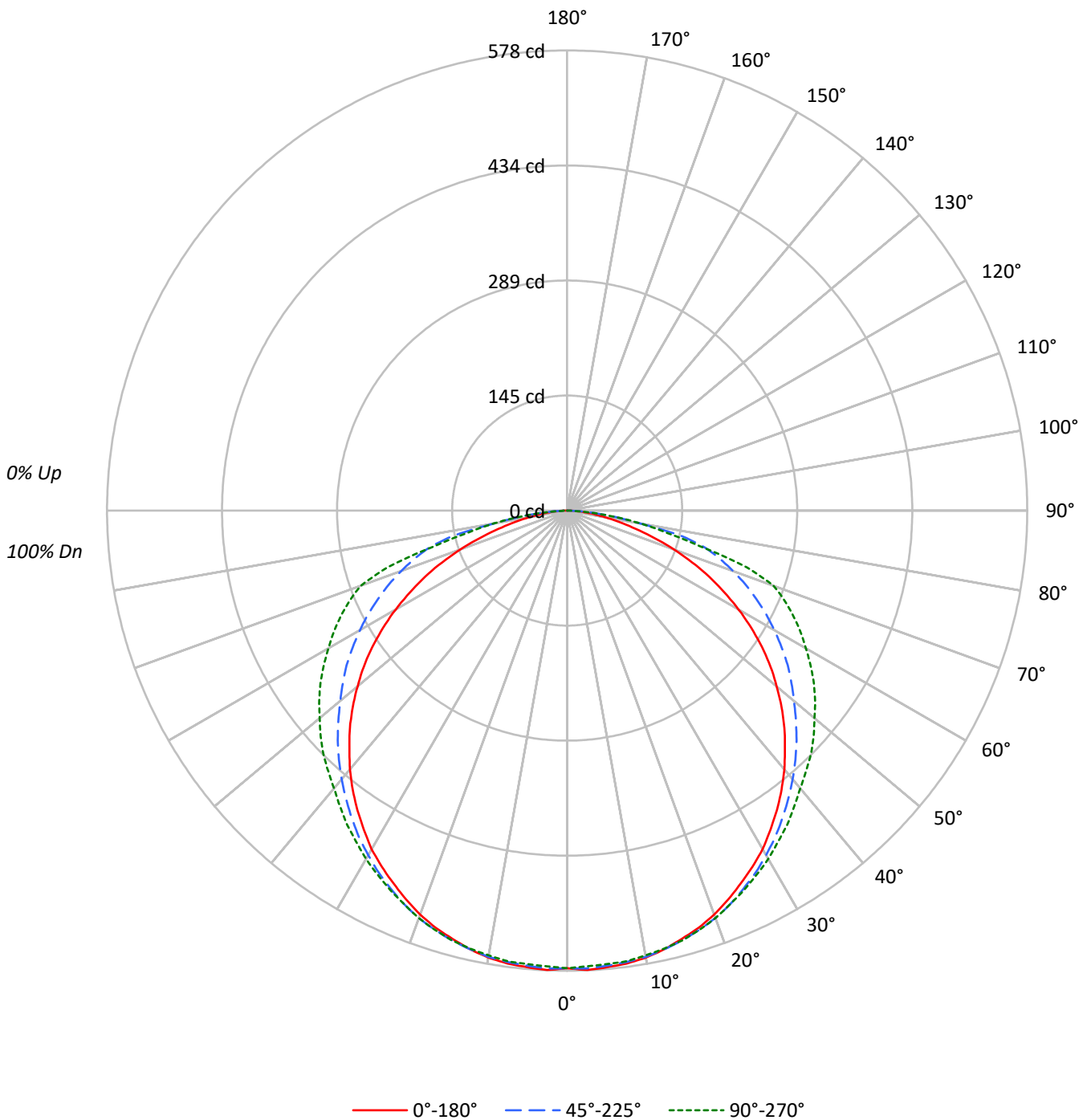
Input Watts (W): 23.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			20
RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	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	102	102	102	100
1	108	103	98	94	105	101	97	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	67	63	58	56
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	773	773	773
5°	778	775	772
10°	779	778	775
15°	776	778	778
20°	773	780	780
25°	767	778	781
30°	763	776	785
35°	754	774	791
40°	746	774	800
45°	734	776	824
50°	719	778	849
55°	701	793	888
60°	670	809	932
65°	628	834	999
70°	562	872	1086
75°	464	933	898
80°	378	721	728
85°	304	479	449



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.6	3.0
10°-20°	157.5	8.7
20°-30°	240.7	13.2
30°-40°	294.4	16.2
40°-50°	315.0	17.3
50°-60°	301.7	16.6
60°-70°	255.2	14.0
70°-80°	161.8	8.9
80°-90°	37.2	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°	452.8	24.9
0°-40°	747.3	41.1
0°-60°	1364.0	75.0
0°-90°	1818.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1818.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	575	575	575	575	575	
5°	576	573	574	573	572	55
15°	557	556	559	559	559	157
25°	516	516	524	526	526	238
35°	459	462	472	478	482	287
45°	386	393	408	424	433	297
55°	299	308	338	366	378	266
65°	197	216	262	298	314	194
75°	89	126	179	178	173	97
85°	20	30	31	28	29	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	574.8	574.8	574.8	574.8	574.8
2.5°	577.6	574.8	575.7	574.8	572.9
5°	575.7	572.9	573.8	572.9	571.9
7.5°	573.8	571.0	571.9	571.0	571.0
10°	570.1	567.2	569.1	568.2	567.2
12.5°	564.4	562.6	564.4	563.5	563.5
15°	556.9	556.0	558.8	558.8	558.8
17.5°	549.4	548.5	552.2	552.2	552.2
20°	540.0	539.1	544.7	544.7	544.7
22.5°	528.7	527.8	535.3	535.3	535.3
25°	516.5	516.5	524.0	525.9	525.9
27.5°	504.3	504.3	512.8	515.6	515.6
30°	491.2	491.2	499.6	503.4	505.3
32.5°	475.2	477.1	486.5	491.2	493.1
35°	459.2	462.1	471.5	478.0	481.8
37.5°	442.3	445.2	456.4	463.9	468.6
40°	424.5	428.3	440.5	449.9	455.5
42.5°	404.8	410.4	424.5	436.7	444.2
45°	386.0	392.6	407.6	424.5	433.0
47.5°	365.3	372.8	389.7	411.3	419.8
50°	343.7	351.2	371.9	396.3	405.7
52.5°	322.1	330.6	355.0	381.3	392.6
55°	298.7	308.0	338.1	366.3	378.5
57.5°	274.2	285.5	319.3	349.4	362.5
60°	248.9	263.0	300.5	332.5	346.5
62.5°	222.6	239.5	281.7	315.6	330.6
65°	197.2	216.0	262.0	297.7	313.7
67.5°	170.0	193.5	242.3	280.8	295.8
70°	142.8	170.0	221.6	261.1	276.1
72.5°	115.5	148.4	201.0	236.7	236.7
75°	89.2	125.8	179.4	178.4	172.8
77.5°	67.6	105.2	147.4	125.8	126.8
80°	48.8	84.5	93.0	93.0	93.9
82.5°	32.9	64.8	60.1	59.2	61.0
85°	19.7	30.1	31.0	28.2	29.1
87.5°	9.4	10.3	8.5	5.6	5.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)