

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: P230432

Luminaire Tested: **24CZ-LD5-35SE-SQP-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230432
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-LD5-35SE-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: 2020.6 lumens
Efficiency: N/A
Efficacy: 70.7 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

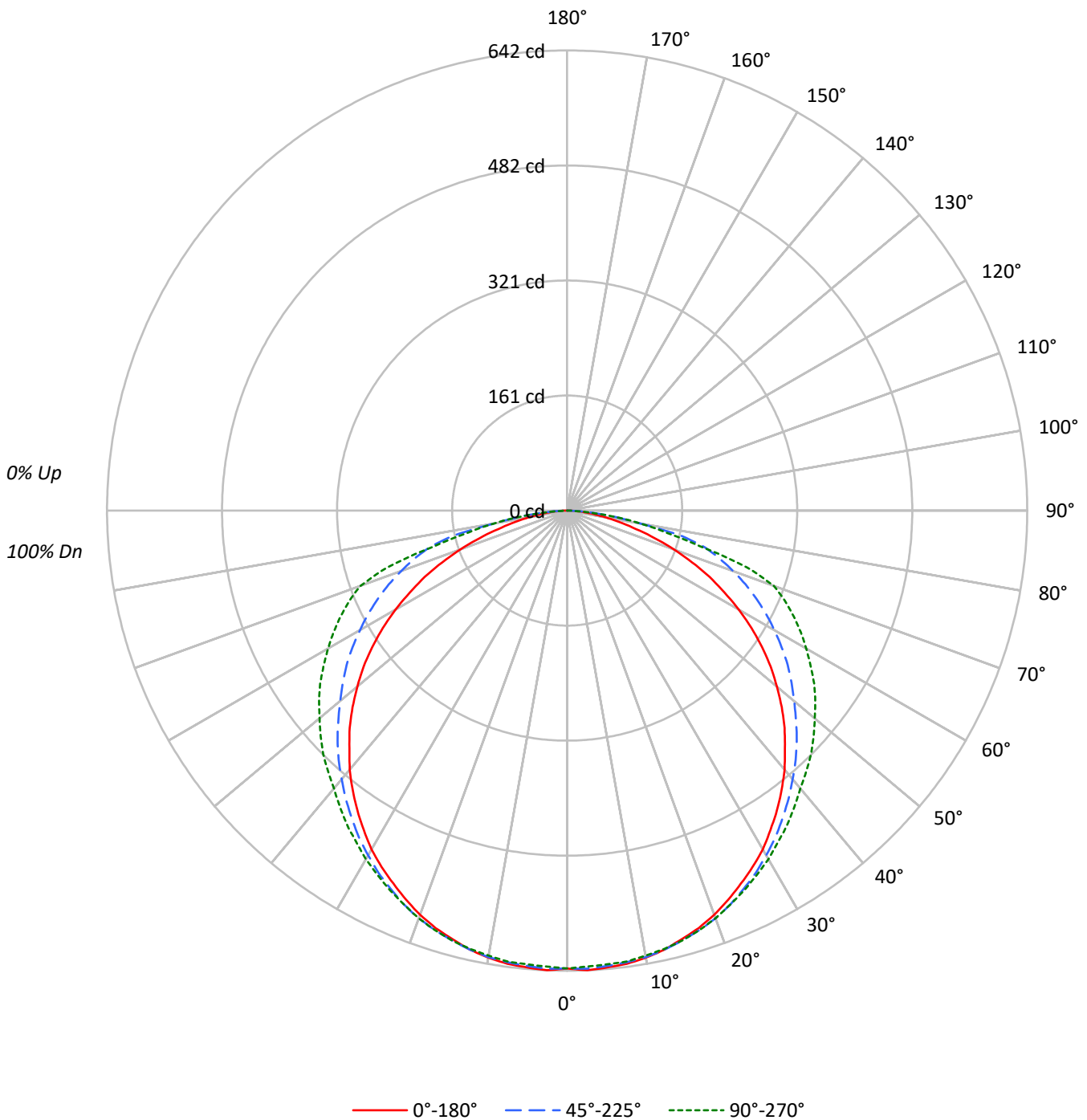
Input Watts (W): 28.57
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	859	859	859
5°	864	861	858
10°	866	864	861
15°	862	865	865
20°	859	867	867
25°	852	865	868
30°	848	863	872
35°	838	861	879
40°	829	860	889
45°	816	862	915
50°	800	865	944
55°	779	881	987
60°	744	899	1036
65°	698	927	1110
70°	624	969	1207
75°	516	1036	998
80°	421	800	809
85°	338	531	500



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.7	3.0
10°-20°	175.1	8.7
20°-30°	267.5	13.2
30°-40°	327.2	16.2
40°-50°	350.1	17.3
50°-60°	335.3	16.6
60°-70°	283.6	14.0
70°-80°	179.8	8.9
80°-90°	41.4	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°	503.3	24.9
0°-40°	830.5	41.1
0°-60°	1515.8	75.0
0°-90°	2020.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2020.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	639	639	639	639	639	
5°	640	637	638	637	636	61
15°	619	618	621	621	621	175
25°	574	574	582	584	584	265
35°	510	514	524	531	535	319
45°	429	436	453	472	481	330
55°	332	342	376	407	421	296
65°	219	240	291	331	349	216
75°	99	140	199	198	192	108
85°	22	33	34	31	32	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	638.7	638.7	638.7	638.7	638.7
2.5°	641.9	638.7	639.8	638.7	636.7
5°	639.8	636.7	637.7	636.7	635.6
7.5°	637.7	634.6	635.6	634.6	634.6
10°	633.5	630.4	632.5	631.4	630.4
12.5°	627.3	625.2	627.3	626.2	626.2
15°	618.9	617.9	621.0	621.0	621.0
17.5°	610.6	609.5	613.7	613.7	613.7
20°	600.1	599.1	605.3	605.3	605.3
22.5°	587.6	586.6	594.9	594.9	594.9
25°	574.0	574.0	582.4	584.5	584.5
27.5°	560.5	560.5	569.9	573.0	573.0
30°	545.9	545.9	555.3	559.4	561.5
32.5°	528.1	530.2	540.6	545.9	547.9
35°	510.4	513.5	523.9	531.2	535.4
37.5°	491.6	494.7	507.2	515.6	520.8
40°	471.8	475.9	489.5	499.9	506.2
42.5°	449.8	456.1	471.8	485.3	493.7
45°	429.0	436.3	453.0	471.8	481.1
47.5°	406.0	414.4	433.1	457.1	466.5
50°	382.0	390.3	413.3	440.4	450.9
52.5°	358.0	367.4	394.5	423.7	436.3
55°	331.9	342.3	375.7	407.0	420.6
57.5°	304.8	317.3	354.9	388.3	402.9
60°	276.6	292.2	334.0	369.5	385.1
62.5°	247.4	266.1	313.1	350.7	367.4
65°	219.2	240.1	291.2	330.9	348.6
67.5°	188.9	215.0	269.3	312.1	328.8
70°	158.6	188.9	246.3	290.1	306.8
72.5°	128.4	164.9	223.4	263.0	263.0
75°	99.2	139.9	199.3	198.3	192.0
77.5°	75.1	116.9	163.9	139.9	140.9
80°	54.3	93.9	103.3	103.3	104.4
82.5°	36.5	72.0	66.8	65.8	67.8
85°	21.9	33.4	34.4	31.3	32.4
87.5°	10.4	11.5	9.4	6.3	6.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)