

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: P263202

Luminaire Tested: **24CZ-LD5-35SE-SQP-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263202  
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-L93050-W2A1-U-3000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1832.0 lumens  
Efficiency: N/A  
Efficacy: 68.8 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

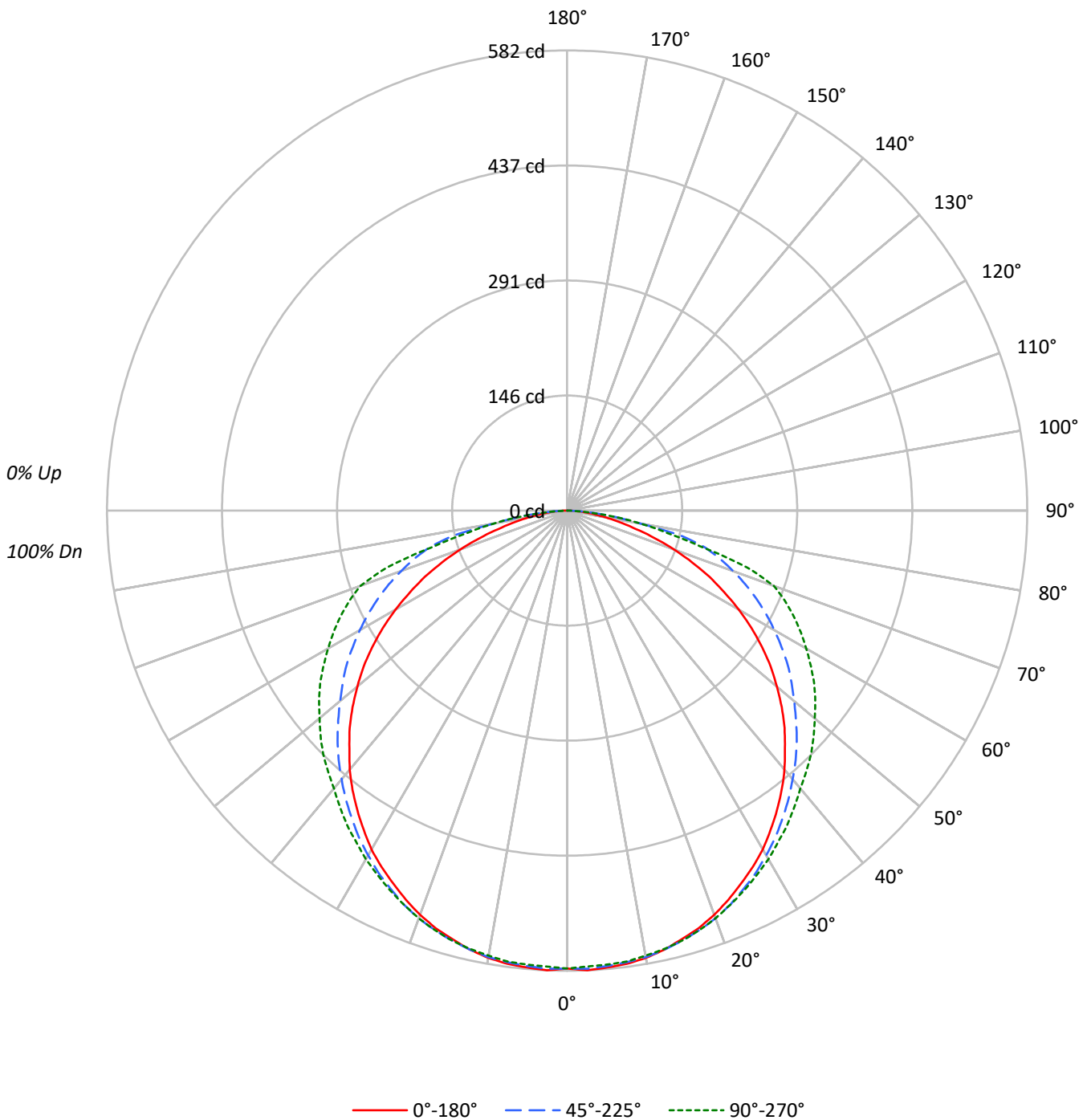
Input Watts (W): 26.63892  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	779	779	779
5°	783	781	778
10°	785	783	781
15°	782	784	784
20°	779	786	786
25°	773	784	787
30°	769	782	791
35°	760	780	797
40°	751	779	806
45°	740	781	830
50°	725	784	856
55°	706	799	895
60°	675	815	940
65°	633	840	1006
70°	566	878	1094
75°	467	939	905
80°	381	726	733
85°	307	482	452



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	55.0	3.0
10°-20°	158.7	8.7
20°-30°	242.6	13.2
30°-40°	296.7	16.2
40°-50°	317.4	17.3
50°-60°	304.0	16.6
60°-70°	257.1	14.0
70°-80°	163.0	8.9
80°-90°	37.5	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°	456.3	24.9
0°-40°	752.9	41.1
0°-60°	1374.3	75.0
0°-90°	1832.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1832.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	579	579	579	579	579	
5°	580	577	578	577	576	55
15°	561	560	563	563	563	158
25°	520	520	528	530	530	240
35°	463	466	475	482	485	289
45°	389	396	411	428	436	300
55°	301	310	341	369	381	268
65°	199	218	264	300	316	196
75°	90	127	181	180	174	98
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°	579.1	579.1	579.1	579.1	579.1
2.5°	582.0	579.1	580.1	579.1	577.2
5°	580.1	577.2	578.2	577.2	576.3
7.5°	578.2	575.3	576.3	575.3	575.3
10°	574.4	571.6	573.4	572.5	571.6
12.5°	568.7	566.8	568.7	567.8	567.8
15°	561.1	560.2	563.0	563.0	563.0
17.5°	553.6	552.6	556.4	556.4	556.4
20°	544.1	543.2	548.8	548.8	548.8
22.5°	532.8	531.8	539.4	539.4	539.4
25°	520.5	520.5	528.0	529.9	529.9
27.5°	508.2	508.2	516.7	519.5	519.5
30°	494.9	494.9	503.4	507.2	509.1
32.5°	478.8	480.7	490.2	494.9	496.8
35°	462.7	465.6	475.0	481.7	485.4
37.5°	445.7	448.5	459.9	467.5	472.2
40°	427.7	431.5	443.8	453.3	458.9
42.5°	407.8	413.5	427.7	440.0	447.6
45°	388.9	395.5	410.7	427.7	436.2
47.5°	368.1	375.7	392.7	414.5	423.0
50°	346.3	353.9	374.7	399.3	408.8
52.5°	324.6	333.1	357.7	384.2	395.5
55°	300.9	310.4	340.7	369.0	381.4
57.5°	276.3	287.7	321.7	352.0	365.3
60°	250.8	265.0	302.8	335.0	349.2
62.5°	224.3	241.3	283.9	318.0	333.1
65°	198.7	217.6	264.0	300.0	316.1
67.5°	171.3	194.9	244.1	282.9	298.1
70°	143.8	171.3	223.3	263.1	278.2
72.5°	116.4	149.5	202.5	238.5	238.5
75°	89.9	126.8	180.7	179.8	174.1
77.5°	68.1	106.0	148.6	126.8	127.7
80°	49.2	85.2	93.7	93.7	94.6
82.5°	33.1	65.3	60.6	59.6	61.5
85°	19.9	30.3	31.2	28.4	29.3
87.5°	9.5	10.4	8.5	5.7	5.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)