

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: P263459

Luminaire Tested: **24CZ-LD5-35SE-SQP-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263459  
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-L92765-W2A1-U-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2080.0 lumens  
Efficiency: N/A  
Efficacy: 79.0 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

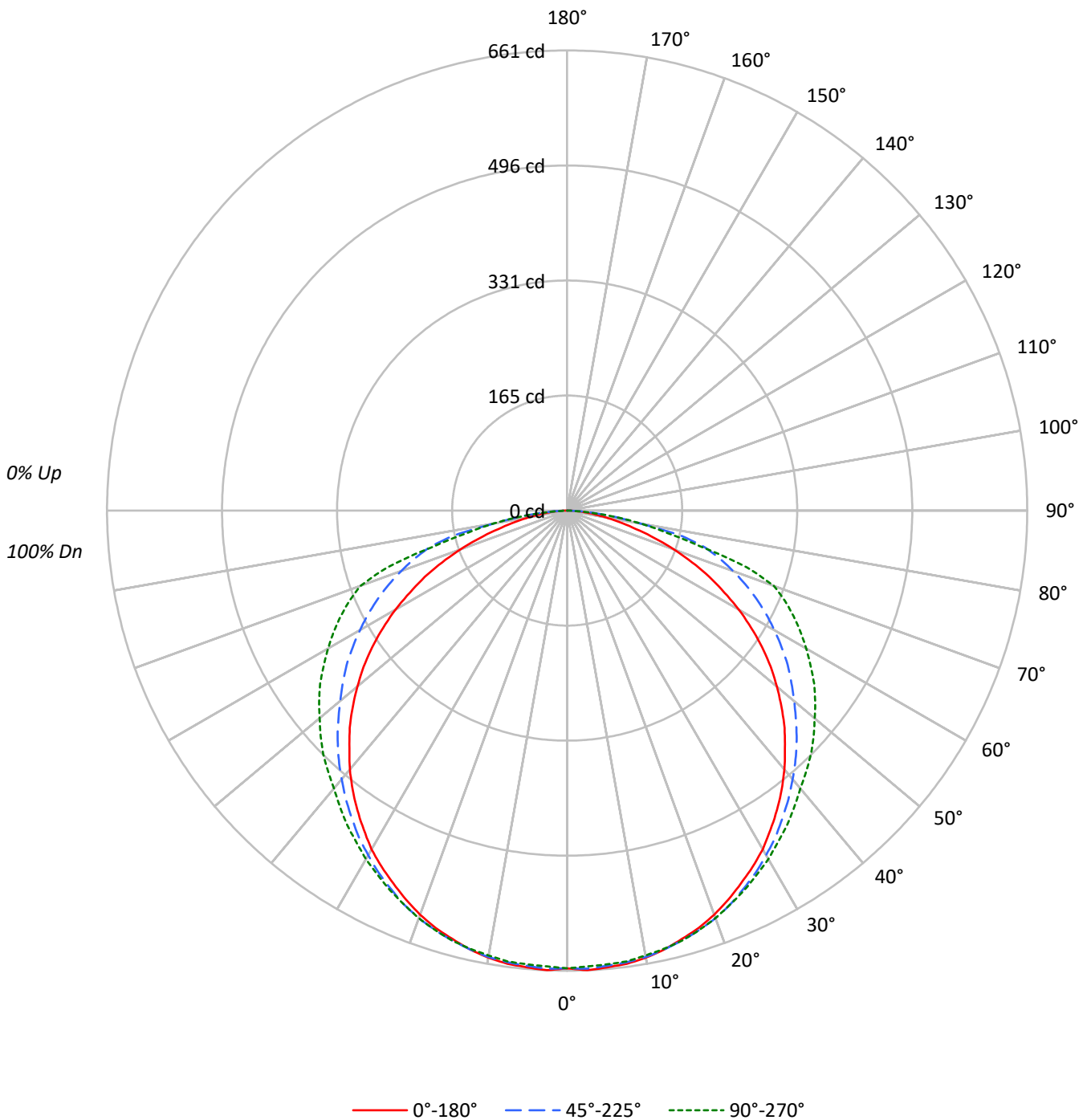
Input Watts (W): 26.319  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P263459

CATALOG NUMBER: 24CZ-LD5-35SE-SQP-UNV-L92765-W2A1-U-4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P263459

CATALOG NUMBER: 24CZ-LD5-35SE-SQP-UNV-L92765-W2A1-U-4000K

**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°	885	885	885
5°	890	887	884
10°	891	890	887
15°	887	891	891
20°	885	892	892
25°	877	890	893
30°	873	888	898
35°	863	886	905
40°	853	885	915
45°	840	887	942
50°	823	891	971
55°	802	907	1016
60°	766	925	1067
65°	718	954	1142
70°	642	998	1243
75°	531	1067	1028
80°	433	824	832
85°	349	548	514



TEST NUMBER: P263459

CATALOG NUMBER: 24CZ-LD5-35SE-SQP-UNV-L92765-W2A1-U-4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.4	3.0
10°-20°	180.2	8.7
20°-30°	275.4	13.2
30°-40°	336.8	16.2
40°-50°	360.4	17.3
50°-60°	345.1	16.6
60°-70°	291.9	14.0
70°-80°	185.1	8.9
80°-90°	42.6	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°	518.0	24.9
0°-40°	854.9	41.1
0°-60°	1560.4	75.0
0°-90°	2080.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2080.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	658	658	658	658	658	
5°	659	655	656	655	654	63
15°	637	636	639	639	639	180
25°	591	591	600	602	602	273
35°	525	529	539	547	551	329
45°	442	449	466	486	495	340
55°	342	352	387	419	433	305
65°	226	247	300	341	359	222
75°	102	144	205	204	198	111
85°	23	34	36	32	33	27
90°	0	0	0	0	0	



TEST NUMBER: P263459

CATALOG NUMBER: 24CZ-LD5-35SE-SQP-UNV-L92765-W2A1-U-4000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	657.5	657.5	657.5	657.5	657.5
2.5°	660.8	657.5	658.6	657.5	655.4
5°	658.6	655.4	656.5	655.4	654.3
7.5°	656.5	653.2	654.3	653.2	653.2
10°	652.2	648.9	651.1	650.0	648.9
12.5°	645.7	643.6	645.7	644.6	644.6
15°	637.1	636.0	639.3	639.3	639.3
17.5°	628.5	627.4	631.7	631.7	631.7
20°	617.8	616.7	623.1	623.1	623.1
22.5°	604.9	603.8	612.4	612.4	612.4
25°	590.9	590.9	599.5	601.7	601.7
27.5°	576.9	576.9	586.6	589.8	589.8
30°	561.9	561.9	571.6	575.9	578.0
32.5°	543.6	545.8	556.5	561.9	564.1
35°	525.4	528.6	539.3	546.9	551.2
37.5°	506.0	509.3	522.2	530.7	536.1
40°	485.6	489.9	503.9	514.6	521.1
42.5°	463.1	469.5	485.6	499.6	508.2
45°	441.6	449.1	466.3	485.6	495.3
47.5°	417.9	426.5	445.9	470.6	480.3
50°	393.2	401.8	425.5	453.4	464.1
52.5°	368.5	378.2	406.1	436.2	449.1
55°	341.7	352.4	386.8	419.0	433.0
57.5°	313.7	326.6	365.3	399.7	414.7
60°	284.7	300.8	343.8	380.3	396.5
62.5°	254.6	274.0	322.3	361.0	378.2
65°	225.6	247.1	299.8	340.6	358.8
67.5°	194.5	221.3	277.2	321.2	338.4
70°	163.3	194.5	253.6	298.7	315.9
72.5°	132.2	169.8	229.9	270.7	270.7
75°	102.1	144.0	205.2	204.1	197.7
77.5°	77.4	120.3	168.7	144.0	145.0
80°	55.9	96.7	106.4	106.4	107.4
82.5°	37.6	74.1	68.8	67.7	69.8
85°	22.6	34.4	35.5	32.2	33.3
87.5°	10.7	11.8	9.7	6.4	6.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)