

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: P263504

Luminaire Tested: **24CZ-LD5-40-RDP-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263504  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25696)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-40-RDP-UNV-L83050-W2A1-U-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH RDP LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2972.0 lumens  
Efficiency: N/A  
Efficacy: 102.8 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

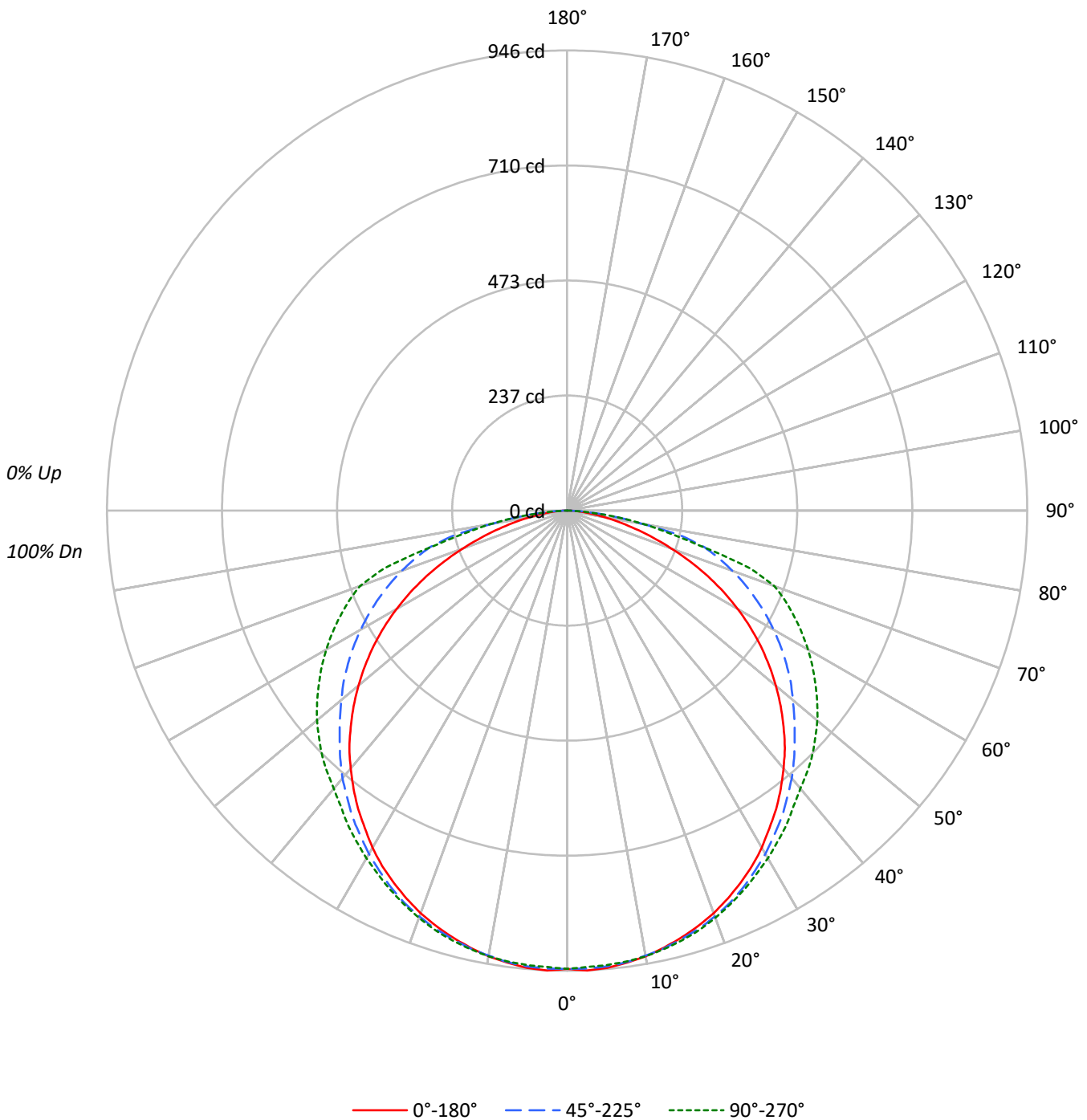
Input Watts (W): 28.922256  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P263504

CATALOG NUMBER: 24CZ-LD5-40-RDP-UNV-L83050-W2A1-U-4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P263504

CATALOG NUMBER: 24CZ-LD5-40-RDP-UNV-L83050-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	62	58	56
4	81	68	59	52	78	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	61	48	40	34	47	39	34	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	27
9	55	41	33	27	53	41	32	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°	1268	1268	1268
5°	1274	1271	1267
10°	1271	1269	1271
15°	1265	1270	1274
20°	1261	1271	1276
25°	1253	1271	1277
30°	1243	1266	1282
35°	1230	1264	1293
40°	1215	1262	1310
45°	1197	1258	1356
50°	1173	1268	1406
55°	1139	1290	1462
60°	1090	1319	1539
65°	1015	1360	1640
70°	898	1422	1784
75°	753	1521	1498
80°	600	1202	1247
85°	474	814	746



TEST NUMBER: P263504

CATALOG NUMBER: 24CZ-LD5-40-RDP-UNV-L83050-W2A1-U-4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.4	3.0
10°-20°	257.2	8.7
20°-30°	392.8	13.2
30°-40°	480.2	16.2
40°-50°	514.0	17.3
50°-60°	493.1	16.6
60°-70°	416.3	14.0
70°-80°	266.1	9.0
80°-90°	62.9	2.1
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°	739.3	24.9
0°-40°	1219.6	41.0
0°-60°	2226.7	74.9
0°-90°	2972.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2972.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	942	942	942	942	942	
5°	944	938	941	939	938	90
15°	908	906	911	914	914	256
25°	844	843	856	859	860	389
35°	749	755	770	780	787	468
45°	629	639	661	692	712	485
55°	486	502	550	600	623	433
65°	319	350	427	487	515	315
75°	145	206	293	298	288	156
85°	31	51	53	51	48	37
90°	0	0	0	0	0	



TEST NUMBER: P263504

CATALOG NUMBER: 24CZ-LD5-40-RDP-UNV-L83050-W2A1-U-4000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	942.1	942.1	942.1	942.1	942.1
2.5°	946.5	940.7	942.1	942.1	939.2
5°	943.6	937.8	940.7	939.2	937.8
7.5°	937.8	933.4	936.3	936.3	934.8
10°	930.4	926.1	929.0	930.4	930.4
12.5°	920.2	917.3	921.7	921.7	923.1
15°	908.5	905.6	911.4	914.4	914.4
17.5°	895.3	893.9	901.2	902.6	904.1
20°	880.7	879.2	888.0	888.0	890.9
22.5°	863.1	861.7	873.4	873.4	876.3
25°	844.1	842.7	855.8	858.8	860.2
27.5°	823.6	822.2	835.4	839.7	842.7
30°	800.2	800.2	814.9	820.7	825.1
32.5°	773.9	778.3	791.5	800.2	806.1
35°	749.0	754.9	769.5	779.8	787.1
37.5°	721.2	727.1	743.2	756.4	765.1
40°	692.0	699.3	718.3	732.9	746.1
42.5°	662.7	670.0	690.5	712.5	730.0
45°	629.1	639.3	661.3	692.0	712.5
47.5°	595.4	605.7	633.5	671.5	692.0
50°	560.3	572.0	605.7	649.6	671.5
52.5°	523.7	536.9	579.3	626.1	648.1
55°	485.7	501.8	550.1	599.8	623.2
57.5°	446.2	463.8	520.8	573.5	598.4
60°	405.2	427.2	490.1	545.7	572.0
62.5°	362.8	389.1	459.4	516.4	544.2
65°	318.9	349.6	427.2	487.2	515.0
67.5°	273.6	314.5	395.0	457.9	485.7
70°	228.2	276.5	361.4	425.7	453.5
72.5°	185.8	241.4	327.7	387.7	393.5
75°	144.8	206.3	292.6	298.4	288.2
77.5°	108.3	171.2	241.4	215.1	213.6
80°	77.5	137.5	155.1	159.5	160.9
82.5°	51.2	103.9	100.9	103.9	102.4
85°	30.7	51.2	52.7	51.2	48.3
87.5°	14.6	19.0	14.6	13.2	11.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)