

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: P295603

Luminaire Tested: **14RLN-LD5-23-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P295603
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1901-085-1)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14RLN-LD5-23-UNV-L93050-W2A1-U-3000K
Description: RLN LED 1x4 TUNABLE WHITE TROFFER
WITH STANDARD LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1842.0 lumens
Efficiency: N/A
Efficacy: 87.3 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.01 / 1.18
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

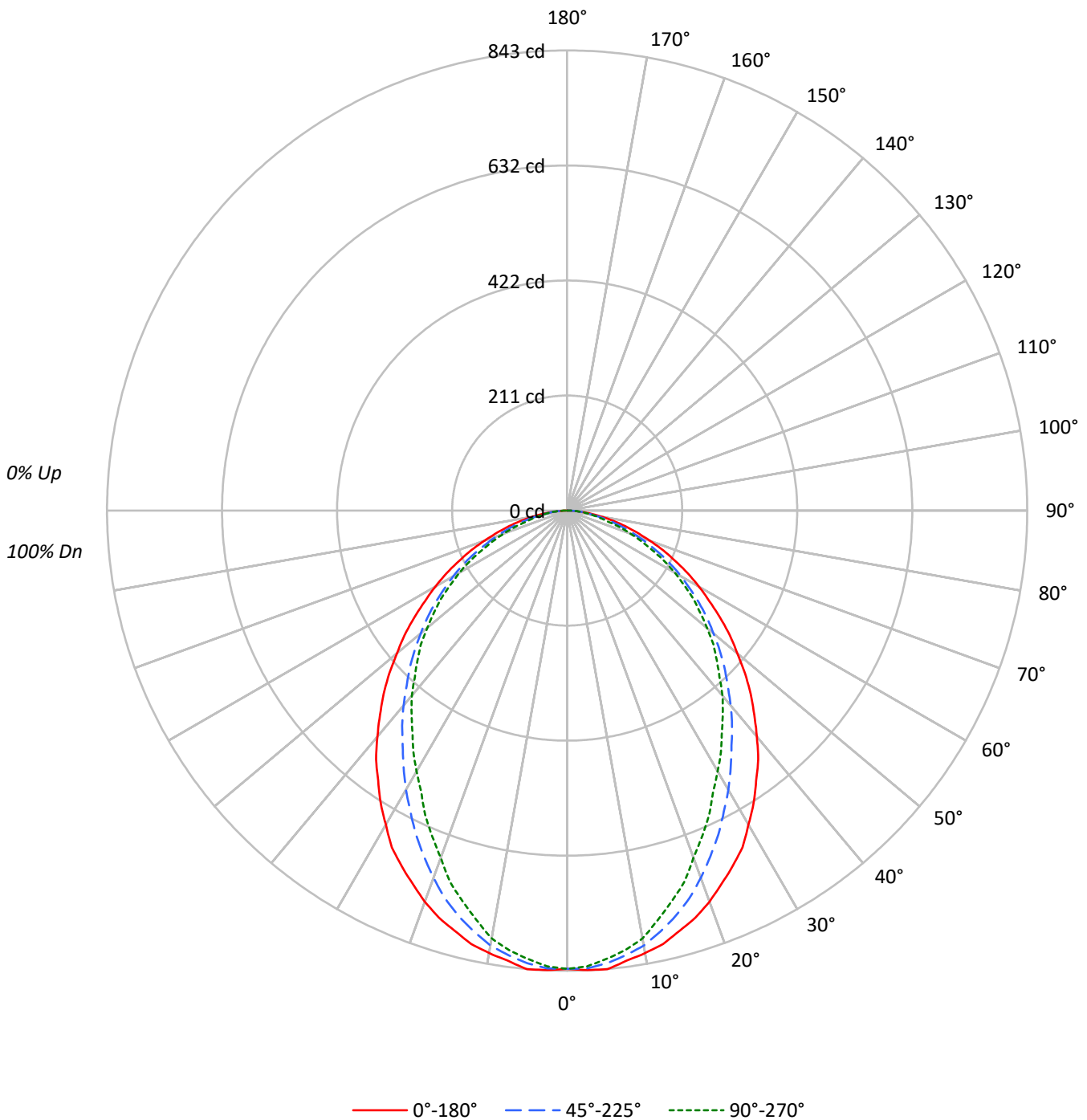
Input Watts (W): 21.111
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P295603

CATALOG NUMBER: 14RLN-LD5-23-UNV-L93050-W2A1-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P295603

CATALOG NUMBER: 14RLN-LD5-23-UNV-L93050-W2A1-U-3000K

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	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					100			
1	110	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85					85			
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72					72			
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62					62			
4	85	73	65	58	82	72	64	58	69	63	57	67	61	56	65	60	56	54					54			
5	78	66	57	51	76	65	57	51	63	55	50	61	54	49	59	53	49	47					47			
6	72	60	51	45	70	59	50	45	57	50	44	55	49	44	54	48	43	41					41			
7	67	54	46	40	66	53	45	40	52	45	39	51	44	39	49	43	39	37					37			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35	45	40	35	33					33			
9	59	46	38	33	57	45	38	32	44	37	32	43	37	32	42	36	32	30					30			
10	55	42	35	30	54	42	35	30	41	34	29	40	34	29	39	33	29	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2259	2259	2259
5°	2278	2249	2228
10°	2249	2211	2175
15°	2220	2142	2064
20°	2184	2050	1938
25°	2132	1945	1827
30°	2064	1835	1714
35°	1984	1725	1623
40°	1899	1637	1555
45°	1809	1552	1475
50°	1703	1466	1401
55°	1606	1384	1325
60°	1503	1298	1227
65°	1392	1199	1100
70°	1268	1077	973
75°	1141	963	792
80°	976	784	747
85°	794	744	744



TEST NUMBER: P295603

CATALOG NUMBER: 14RLN-LD5-23-UNV-L93050-W2A1-U-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.6	4.3
10°-20°	215.7	11.7
20°-30°	302.8	16.4
30°-40°	335.8	18.2
40°-50°	322.4	17.5
50°-60°	270.2	14.7
60°-70°	189.7	10.3
70°-80°	99.0	5.4
80°-90°	27.7	1.5
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°	597.1	32.4
0°-40°	933.0	50.7
0°-60°	1525.6	82.8
0°-90°	1842.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1842.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	840	840	840	840	840	
5°	843	832	832	827	825	80
15°	797	783	769	748	741	225
25°	718	692	655	623	615	330
35°	604	570	525	500	494	378
45°	475	439	408	392	388	366
55°	342	317	295	286	282	306
65°	219	204	188	177	173	217
75°	110	101	93	82	76	116
85°	26	24	24	24	24	30
90°	0	0	0	0	0	



TEST NUMBER: P295603

CATALOG NUMBER: 14RLN-LD5-23-UNV-L93050-W2A1-U-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	839.5	839.5	839.5	839.5	839.5
2.5°	842.6	838.0	839.5	839.5	835.6
5°	843.4	832.5	832.5	827.1	824.7
7.5°	831.7	823.2	821.6	814.6	812.3
10°	823.2	814.6	809.2	799.8	795.9
12.5°	813.1	799.8	789.7	774.2	767.9
15°	796.7	782.7	768.7	748.5	740.7
17.5°	781.9	765.6	744.6	722.0	713.5
20°	762.5	743.0	715.8	684.7	676.9
22.5°	739.9	717.4	685.5	652.0	645.8
25°	718.1	692.5	655.1	623.2	615.4
27.5°	695.6	664.4	621.7	587.4	579.6
30°	664.4	632.6	590.5	557.1	551.6
32.5°	635.7	603.8	557.9	530.6	524.4
35°	603.8	570.3	525.2	499.5	494.1
37.5°	575.0	536.1	496.4	471.5	468.4
40°	540.7	505.7	466.0	447.4	442.7
42.5°	507.3	472.3	434.9	418.6	413.1
45°	475.4	438.8	407.7	392.1	387.5
47.5°	441.9	408.5	378.9	366.5	363.3
50°	406.9	377.4	350.1	338.4	334.6
52.5°	375.8	345.5	322.9	312.0	307.3
55°	342.3	316.7	294.9	285.5	282.4
57.5°	308.9	287.9	266.9	258.3	253.6
60°	279.3	258.3	241.2	231.1	228.0
62.5°	249.0	231.1	214.7	205.4	201.5
65°	218.6	203.8	188.3	176.6	172.7
67.5°	190.6	174.3	161.8	151.7	147.8
70°	161.1	149.4	136.9	127.6	123.7
72.5°	133.8	125.3	114.4	104.3	100.4
75°	109.7	101.1	92.6	81.7	76.2
77.5°	85.6	80.1	71.6	62.2	62.2
80°	63.0	59.9	50.6	49.0	48.2
82.5°	43.6	42.0	36.6	35.8	35.8
85°	25.7	24.1	24.1	24.1	24.1
87.5°	10.9	11.7	12.4	12.4	13.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)