

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: NEO-RAY

Report Number: P231753

Luminaire Tested: **S124-RDR-1-35-X-0048-1-U-DD-1-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231753
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33917)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124-RDR-1-35-X-0048-1-U-DD-1-W
Description: DEFINE 4 LED LINEAR REGRESSED DIRECT RECESSED LED LUMINAIRE WITH FLUSH LENS.
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2870.0 lumens
Efficiency: N/A
Efficacy: 102.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.1 / 1.25
Luminous Opening: Rectangular (W 0.31' x L: 3.92' x H: 0')
CIE Type: Direct

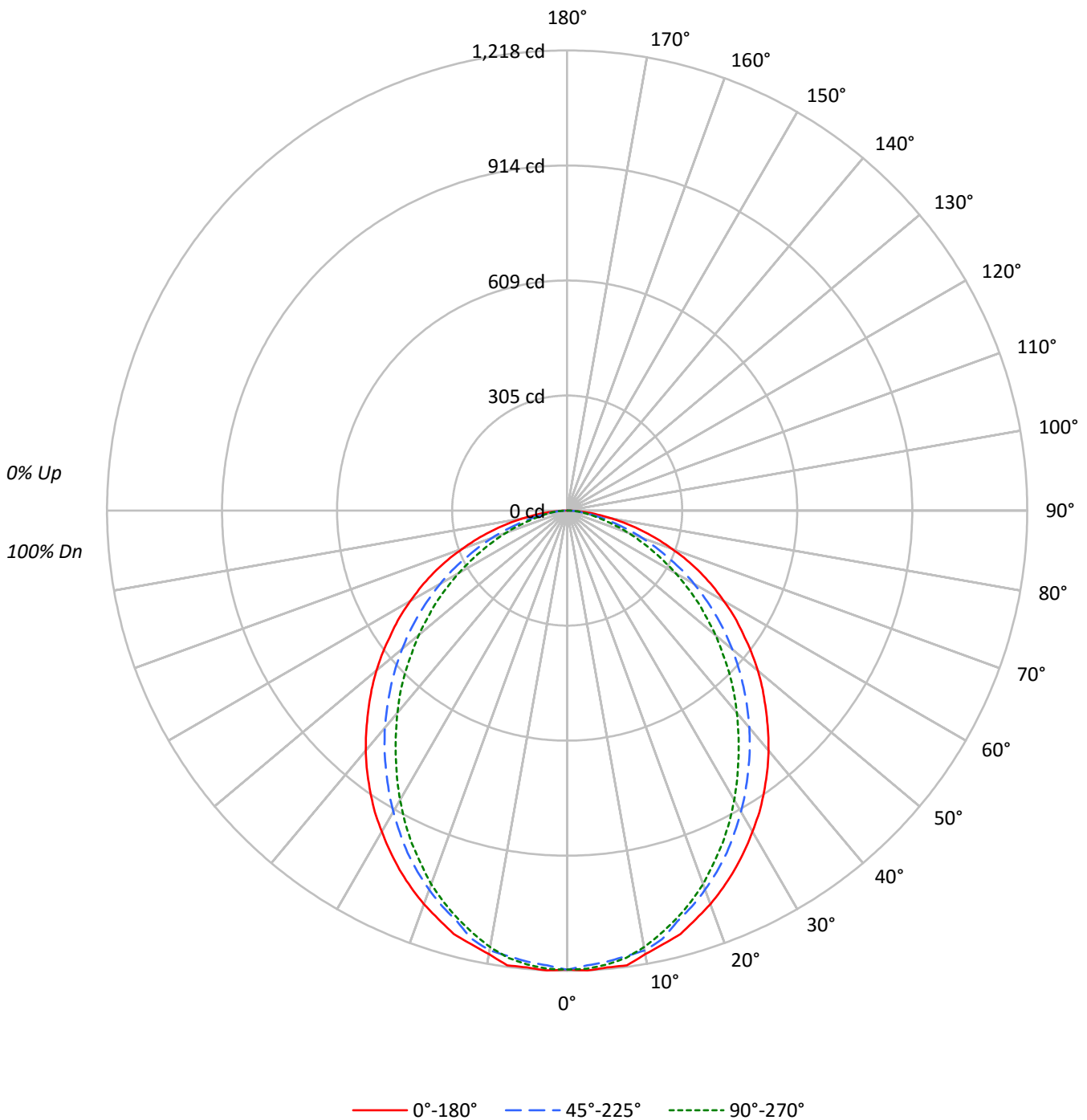
Input Watts (W): 27.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	100	92	86	80	98	90	85	79	87	82	78	84	80	76	81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	62
4	84	73	64	58	82	71	64	58	69	62	57	67	61	56	65	59	55	53
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	44	55	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	39	49	43	38	36
8	62	49	41	35	61	49	41	35	47	40	35	46	39	35	45	39	35	33
9	58	45	37	32	57	45	37	32	44	37	32	43	36	31	41	36	31	30
10	55	42	34	29	54	41	34	29	40	34	29	39	33	29	39	33	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10887	10887	10887
5°	10919	10780	10850
10°	10845	10755	10675
15°	10761	10446	10374
20°	10569	10182	10035
25°	10372	9884	9612
30°	10150	9525	9150
35°	9938	9145	8652
40°	9702	8776	8173
45°	9424	8366	7684
50°	9188	7947	7151
55°	8872	7483	6589
60°	8584	6950	5927
65°	8269	6265	5241
70°	7713	5525	4491
75°	7073	4563	3576
80°	6120	3514	3174
85°	4966	3053	2827



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.6	4.0
10°-20°	320.0	11.1
20°-30°	463.4	16.1
30°-40°	527.7	18.4
40°-50°	514.9	17.9
50°-60°	434.8	15.1
60°-70°	304.0	10.6
70°-80°	152.9	5.3
80°-90°	37.8	1.3
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°	897.9	31.3
0°-40°	1425.6	49.7
0°-60°	2375.3	82.8
0°-90°	2870.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2870.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1215	1215	1215	1215	1215	
5°	1214	1210	1198	1208	1206	115
15°	1160	1151	1126	1126	1118	326
25°	1049	1034	1000	983	972	483
35°	908	882	836	805	791	568
45°	744	715	660	621	606	574
55°	568	535	479	436	422	509
65°	390	352	296	260	247	385
75°	204	172	132	110	103	216
85°	48	32	30	29	28	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1215.0	1215.0	1215.0	1215.0	1215.0
2.5°	1218.3	1216.1	1205.1	1216.1	1213.9
5°	1213.9	1209.5	1198.5	1208.4	1206.2
7.5°	1213.9	1208.4	1189.7	1196.3	1194.1
10°	1191.9	1195.2	1182.0	1175.4	1173.2
12.5°	1175.4	1169.9	1162.2	1152.4	1146.9
15°	1160.0	1151.3	1126.0	1126.0	1118.3
17.5°	1133.7	1127.1	1098.5	1098.5	1086.4
20°	1108.4	1098.5	1067.8	1067.8	1052.4
22.5°	1079.9	1068.9	1034.8	1031.5	1011.7
25°	1049.1	1033.7	999.7	983.2	972.2
27.5°	1016.1	997.5	960.1	939.2	929.4
30°	981.0	961.2	920.6	895.3	884.3
32.5°	946.9	923.9	878.8	851.4	838.2
35°	908.5	882.1	836.0	805.2	790.9
37.5°	870.0	843.7	794.2	759.1	744.8
40°	829.4	799.7	750.3	714.0	698.7
42.5°	786.5	756.9	705.3	666.8	653.6
45°	743.7	715.1	660.2	620.7	606.4
47.5°	702.0	670.1	615.2	573.4	557.0
50°	659.1	626.2	570.1	528.4	513.0
52.5°	614.1	581.1	525.1	482.3	464.7
55°	567.9	535.0	479.0	436.1	421.8
57.5°	526.2	488.8	432.8	391.1	375.7
60°	479.0	441.6	387.8	346.0	330.7
62.5°	435.0	396.6	343.8	303.2	287.8
65°	390.0	351.5	295.5	260.4	247.2
67.5°	342.7	306.5	252.7	219.7	207.6
70°	294.4	259.3	210.9	181.3	171.4
72.5°	249.4	215.3	170.3	143.9	137.3
75°	204.3	172.5	131.8	109.9	103.3
77.5°	160.4	131.8	97.8	81.3	79.1
80°	118.6	94.5	68.1	61.5	61.5
82.5°	81.3	59.3	47.2	45.0	45.0
85°	48.3	31.9	29.7	28.6	27.5
87.5°	20.9	14.3	13.2	12.1	12.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)