

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: P242721

Luminaire Tested: **S124RDR-S350D935-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P242721  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-26)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S350D935-X4F0-XX-UDD-F-W  
Description: DEFINE 4 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER  
STANDARD LIGHT ENGINE  
Light Source: (92) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

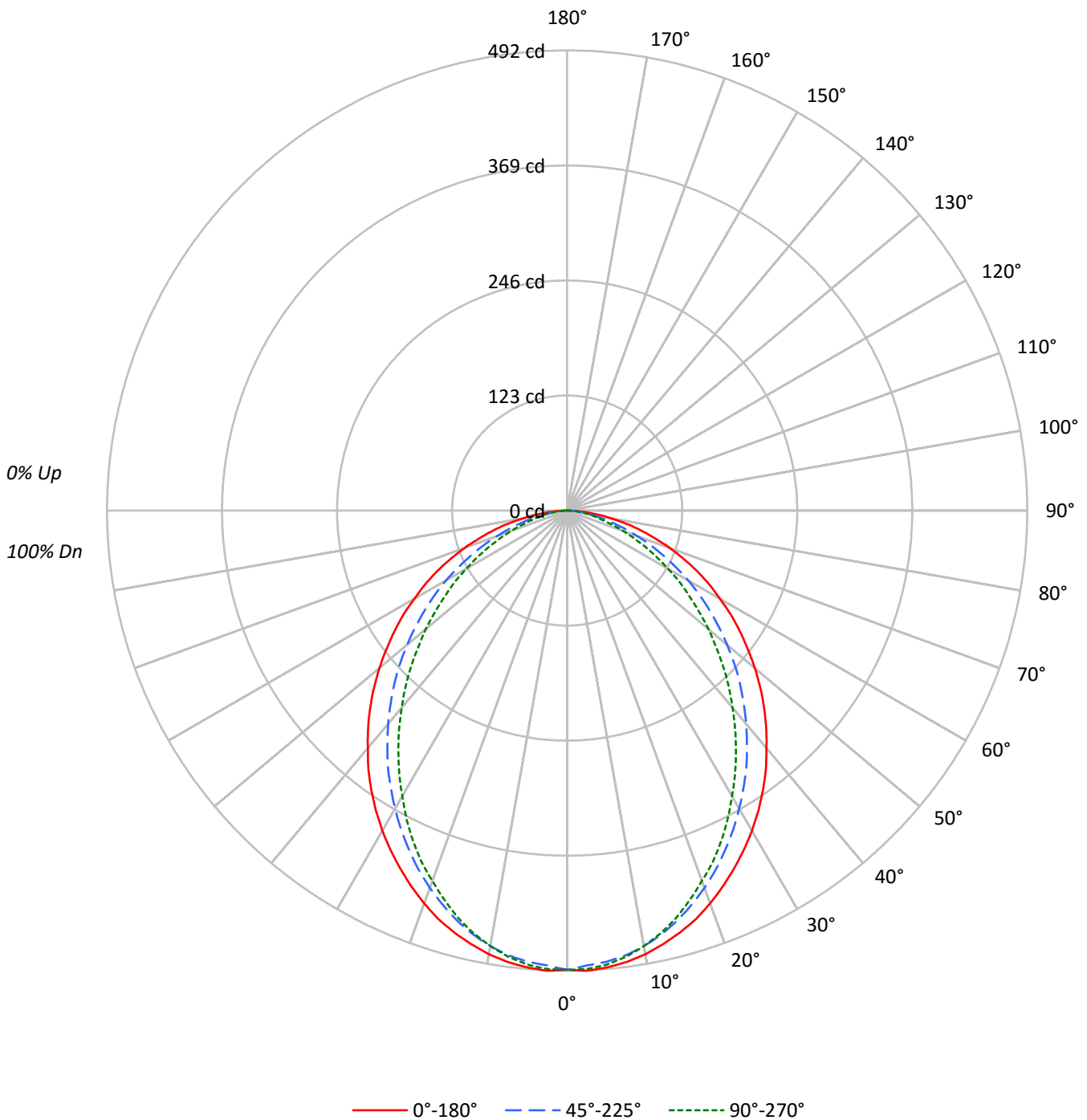
Lumens per Lamp: N/A  
Luminaire Lumens: 1134.4 lumens  
Efficiency: N/A  
Efficacy: 97.8 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24  
Luminous Opening: Rectangular (W 0.31' x L: 3.88' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 11.6  
Input Voltage (V): 120  
Input Current (Ain): 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	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	74	72
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62
4	84	73	65	58	82	72	64	58	69	62	57	67	61	56	65	60	56	54
5	78	66	57	51	76	65	56	50	62	55	50	61	54	49	59	53	49	47
6	72	59	51	45	70	58	50	44	57	49	44	55	49	44	53	48	43	41
7	67	54	46	40	65	53	45	40	52	45	39	50	44	39	49	43	39	37
8	63	50	41	36	61	49	41	36	48	40	35	46	40	35	45	39	35	33
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	30
10	55	42	35	29	54	42	34	29	41	34	29	40	33	29	39	33	29	27

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4364	4364	4364
5°	4374	4320	4347
10°	4347	4268	4268
15°	4297	4179	4148
20°	4228	4061	3986
25°	4141	3923	3823
30°	4055	3777	3619
35°	3961	3627	3415
40°	3848	3454	3193
45°	3742	3285	2968
50°	3623	3088	2730
55°	3496	2884	2470
60°	3355	2660	2206
65°	3226	2381	1946
70°	3038	2071	1650
75°	2802	1717	1343
80°	2442	1310	1234
85°	2070	1193	1112



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.2	4.1
10°-20°	128.7	11.3
20°-30°	185.8	16.4
30°-40°	210.6	18.6
40°-50°	203.4	17.9
50°-60°	169.1	14.9
60°-70°	116.7	10.3
70°-80°	59.0	5.2
80°-90°	15.0	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°	360.7	31.8
0°-40°	571.4	50.4
0°-60°	943.8	83.2
0°-90°	1134.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1134.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	491	491	491	491	491	
5°	490	489	484	488	487	47
15°	467	464	454	453	451	132
25°	422	415	400	394	390	195
35°	365	353	334	321	315	228
45°	298	284	261	243	236	230
55°	226	210	186	166	159	202
65°	153	137	113	97	92	151
75°	82	68	50	41	39	86
85°	20	13	12	11	11	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	491.0	491.0	491.0	491.0	491.0
2.5°	492.5	491.0	486.8	491.0	490.6
5°	490.2	488.7	484.2	488.0	487.2
7.5°	486.8	485.3	479.7	482.3	481.2
10°	481.6	479.7	472.9	474.4	472.9
12.5°	474.8	472.5	464.3	465.0	462.8
15°	466.9	463.5	454.1	453.4	450.7
17.5°	457.9	453.0	442.1	440.2	436.5
20°	447.0	442.1	429.3	426.3	421.4
22.5°	435.0	429.3	415.4	410.5	406.8
25°	422.2	415.4	400.0	393.6	389.8
27.5°	409.0	400.7	384.6	377.1	371.8
30°	395.1	385.7	368.0	358.6	352.6
32.5°	380.4	369.5	351.1	339.8	334.2
35°	365.0	353.0	334.2	321.4	314.7
37.5°	348.9	336.5	315.8	301.9	295.1
40°	331.6	319.2	297.7	281.9	275.2
42.5°	315.0	301.9	279.3	263.2	256.0
45°	297.7	283.8	261.3	242.9	236.1
47.5°	280.1	265.8	242.5	223.3	215.8
50°	262.0	247.4	223.3	204.5	197.4
52.5°	243.6	229.3	204.5	185.3	177.8
55°	225.6	210.5	186.1	166.5	159.4
57.5°	207.9	192.1	168.0	148.1	142.9
60°	188.7	173.7	149.6	130.1	124.1
62.5°	171.4	155.6	130.8	113.2	108.6
65°	153.4	137.2	113.2	97.0	92.5
67.5°	134.6	119.2	96.6	82.3	77.1
70°	116.9	101.1	79.7	67.3	63.5
72.5°	98.1	84.2	64.3	54.1	50.8
75°	81.6	67.7	50.0	41.4	39.1
77.5°	64.3	52.3	37.2	31.2	30.5
80°	47.7	36.8	25.6	24.4	24.1
82.5°	33.5	23.7	18.4	17.7	17.3
85°	20.3	12.8	11.7	10.9	10.9
87.5°	8.6	5.6	5.3	4.9	5.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)