

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1059323

Luminaire Tested: S123RDR-S560D950-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059323
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-68)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S560D950-X4F0-XX-UDD-SVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

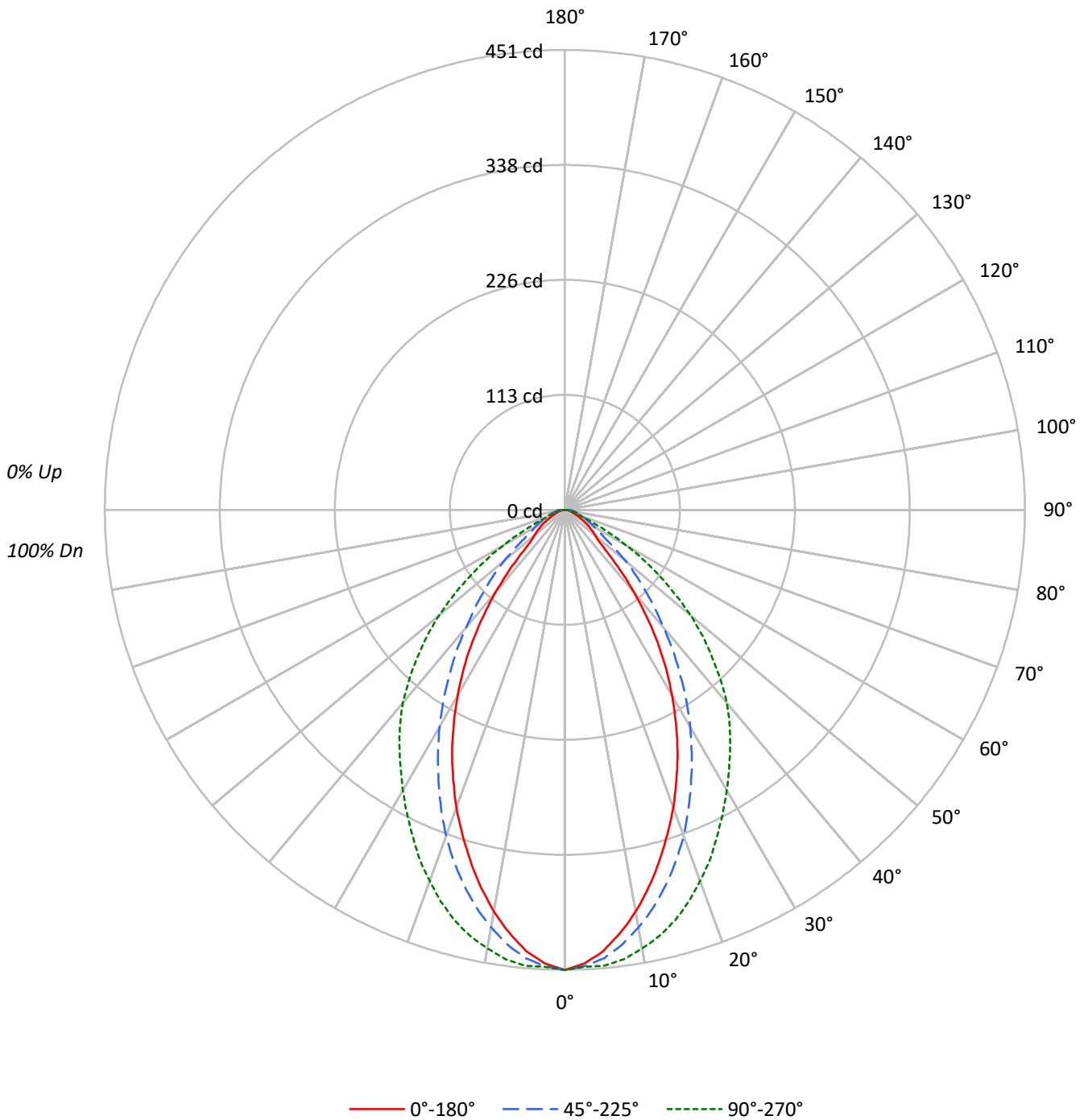
Lumens per Lamp: N/A
Luminaire Lumens: 604.3 lumens
Efficiency: N/A
Efficacy: 30.8 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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: 24 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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	91	81	74	69	88	80	73	68	77	72	67	75	70	66	73	69	66	64
5	85	74	67	61	83	73	66	61	71	65	61	69	64	60	68	63	59	58
6	79	68	61	56	78	67	60	55	66	60	55	64	59	54	63	58	54	52
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48
8	70	58	51	46	69	58	51	46	57	50	46	56	50	46	54	49	45	44
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40
10	62	51	44	39	61	50	44	39	50	43	39	49	43	39	48	43	39	37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5298	5298	5298
5°	5117	5202	5288
10°	4767	4955	5207
15°	4340	4637	5068
20°	3885	4255	4840
25°	3388	3798	4574
30°	2849	3331	4305
35°	2266	2823	4051
40°	1616	2302	3786
45°	963	1848	3391
50°	711	1408	2936
55°	594	958	2334
60°	479	789	1639
65°	383	678	878
70°	316	587	542
75°	299	567	508
80°	311	622	487
85°	445	889	620

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3391 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.4	6.9
10°-20°	107.7	17.8
20°-30°	137.3	22.7
30°-40°	129.2	21.4
40°-50°	92.8	15.4
50°-60°	53.2	8.8
60°-70°	24.3	4.0
70°-80°	12.2	2.0
80°-90°	6.0	1.0
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°	286.5	47.4
0°-40°	415.7	68.8
0°-60°	561.7	93.0
0°-90°	604.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	604.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	451	451	451	451	451	
5°	434	443	441	445	449	40
15°	357	370	381	402	417	100
25°	262	273	293	325	353	119
35°	158	169	197	242	283	98
45°	58	70	111	164	204	49
55°	29	30	47	86	114	26
65°	14	19	24	27	32	14
75°	7	13	12	11	11	7
85°	3	7	7	6	5	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	451.2	451.2	451.2	451.2	451.2
2.5°	445.3	451.9	447.9	447.9	448.6
5°	434.1	442.6	441.3	444.6	448.6
7.5°	418.3	427.5	430.1	438.0	444.6
10°	399.8	410.4	415.6	428.1	436.7
12.5°	379.4	391.3	399.8	415.6	428.1
15°	357.0	369.5	381.4	401.8	416.9
17.5°	333.9	346.5	361.6	385.3	403.1
20°	310.9	323.4	340.5	365.6	387.3
22.5°	285.9	298.4	316.8	345.1	371.5
25°	261.5	273.4	293.1	324.7	353.0
27.5°	235.8	247.7	269.4	303.6	335.3
30°	210.1	222.0	245.7	282.6	317.5
32.5°	184.4	195.6	221.3	262.2	299.7
35°	158.1	169.3	196.9	241.7	282.6
37.5°	131.1	142.3	174.5	223.3	265.4
40°	105.4	117.9	150.2	204.8	247.0
42.5°	80.4	93.5	130.4	185.1	225.9
45°	58.0	70.5	111.3	164.0	204.2
47.5°	44.1	50.7	94.2	142.9	183.1
50°	38.9	39.5	77.1	123.8	160.7
52.5°	33.6	34.3	59.9	105.4	137.0
55°	29.0	29.6	46.8	86.3	114.0
57.5°	24.4	25.7	38.2	68.5	91.6
60°	20.4	23.1	33.6	52.0	69.8
62.5°	16.5	21.1	29.0	38.2	50.1
65°	13.8	19.1	24.4	27.0	31.6
67.5°	11.2	17.8	20.4	19.1	19.1
70°	9.2	15.8	17.1	15.8	15.8
72.5°	7.9	15.1	14.5	13.2	13.2
75°	6.6	13.2	12.5	11.2	11.2
77.5°	5.9	11.2	10.5	9.9	9.2
80°	4.6	9.2	9.2	8.6	7.2
82.5°	4.0	7.9	7.9	7.2	5.9
85°	3.3	6.6	6.6	5.9	4.6
87.5°	2.6	5.9	5.9	5.3	3.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)