

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: P1059327

Luminaire Tested: S123RDR-S560D950-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059327
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-64)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S560D950-X4F0-XX-UDD-WVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

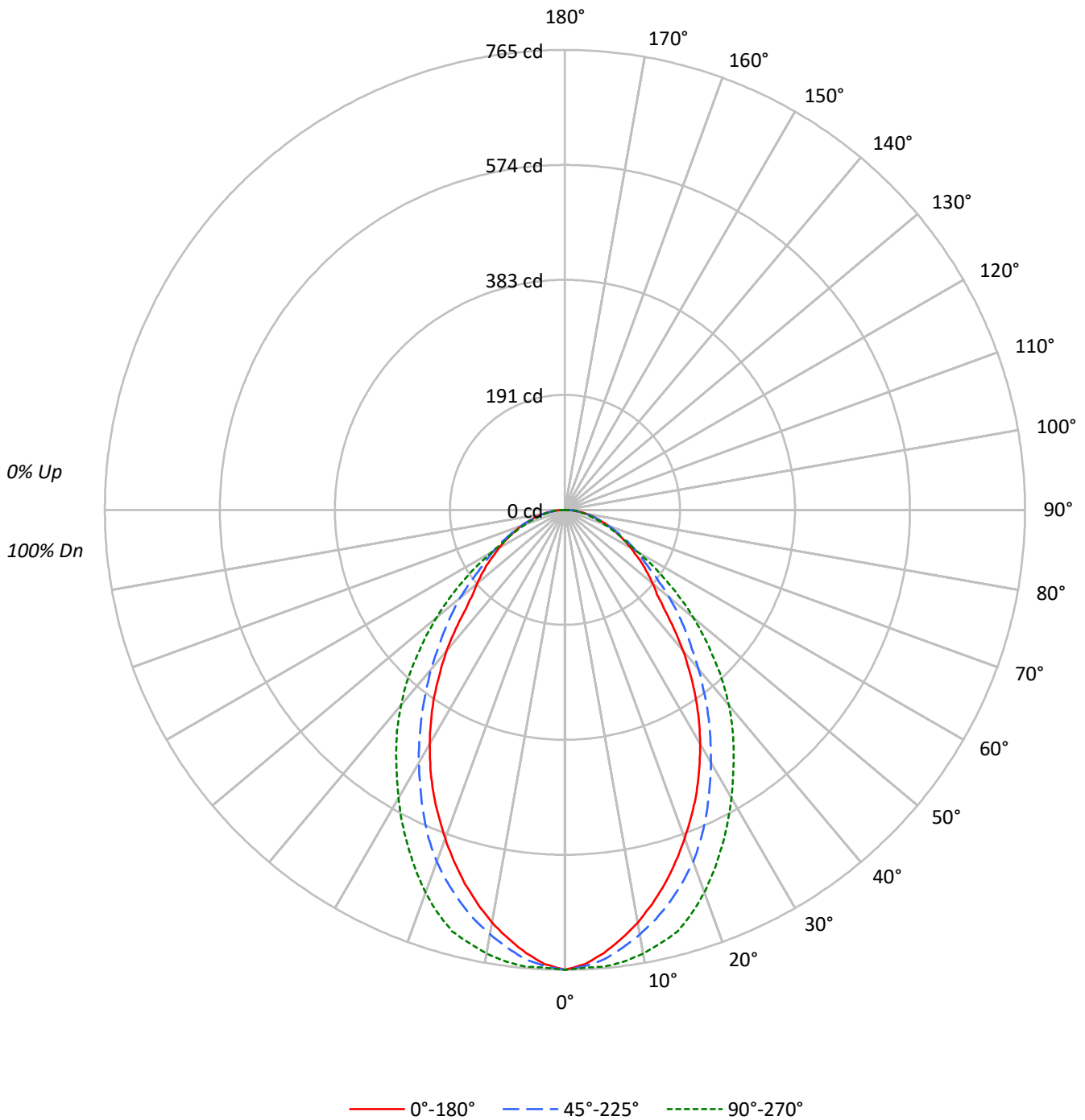
Lumens per Lamp: N/A
Luminaire Lumens: 1344.4 lumens
Efficiency: N/A
Efficacy: 68.6 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.1 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	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	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87				
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75				
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66				
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58				
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51				
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48	46				
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	41				
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38				
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34				
10	58	46	39	34	57	45	38	34	45	38	34	44	38	33	43	37	33	32				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8984	8984	8984
5°	8724	8848	8987
10°	8314	8549	8934
15°	7820	8205	8821
20°	7273	7784	8466
25°	6714	7217	8002
30°	6097	6588	7508
35°	5427	5946	7013
40°	4683	5299	6499
45°	3871	4691	5827
50°	3476	4138	5088
55°	3222	3531	4219
60°	2968	3217	3232
65°	2762	2909	2706
70°	2599	2644	2372
75°	2450	2359	2092
80°	2313	2137	1961
85°	2223	2398	2223

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5827 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.9	5.3
10°-20°	190.9	14.2
20°-30°	258.3	19.2
30°-40°	265.4	19.7
40°-50°	222.9	16.6
50°-60°	159.8	11.9
60°-70°	101.7	7.6
70°-80°	55.9	4.2
80°-90°	18.6	1.4
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°	520.0	38.7
0°-40°	785.4	58.4
0°-60°	1168.1	86.9
0°-90°	1344.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1344.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	765	765	765	765	765	
5°	740	753	751	756	762	69
15°	643	661	675	704	726	180
25°	518	538	557	587	618	237
35°	379	399	415	452	489	236
45°	233	254	282	323	351	184
55°	157	161	172	196	206	141
65°	99	105	105	99	97	99
75°	54	59	52	48	46	57
85°	16	17	18	18	16	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	765.1	765.1	765.1	765.1	765.1
2.5°	756.5	767.1	759.8	760.5	762.4
5°	740.1	753.2	750.6	755.9	762.4
7.5°	719.6	734.1	734.8	747.3	757.8
10°	697.3	712.4	717.0	736.1	749.3
12.5°	670.9	687.4	697.3	721.0	738.1
15°	643.3	661.0	674.9	703.8	725.6
17.5°	613.0	632.1	649.9	680.8	703.2
20°	582.0	602.4	622.9	651.8	677.5
22.5°	549.8	570.8	591.9	620.2	648.5
25°	518.2	537.9	557.0	587.3	617.6
27.5°	483.9	504.3	520.8	554.4	586.0
30°	449.7	470.1	485.9	520.8	553.7
32.5°	414.1	435.2	449.7	485.9	520.1
35°	378.6	399.0	414.8	451.7	489.2
37.5°	341.1	363.4	379.2	420.7	457.6
40°	305.5	326.6	345.7	389.1	424.0
42.5°	268.6	290.4	312.1	356.9	389.1
45°	233.1	253.5	282.5	323.3	350.9
47.5°	207.4	220.6	254.1	288.4	314.7
50°	190.3	195.5	226.5	256.8	278.5
52.5°	173.2	177.1	198.2	225.8	242.3
55°	157.4	160.7	172.5	195.5	206.1
57.5°	140.2	143.5	153.4	166.6	172.5
60°	126.4	129.0	137.0	138.9	137.6
62.5°	112.6	116.5	120.5	115.9	113.9
65°	99.4	105.3	104.7	98.8	97.4
67.5°	87.6	93.5	90.2	84.3	82.3
70°	75.7	81.6	77.0	71.1	69.1
72.5°	64.5	71.1	63.9	58.6	57.3
75°	54.0	59.3	52.0	48.1	46.1
77.5°	44.1	48.1	41.5	38.2	36.9
80°	34.2	36.9	31.6	29.6	29.0
82.5°	25.0	26.3	23.0	24.4	23.7
85°	16.5	17.1	17.8	18.4	16.5
87.5°	7.9	11.2	11.2	10.5	8.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)