

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1059288

Luminaire Tested: S123RDRP-S560D927-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059288
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-65)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S560D927-X4F0-XX-UDD-SVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

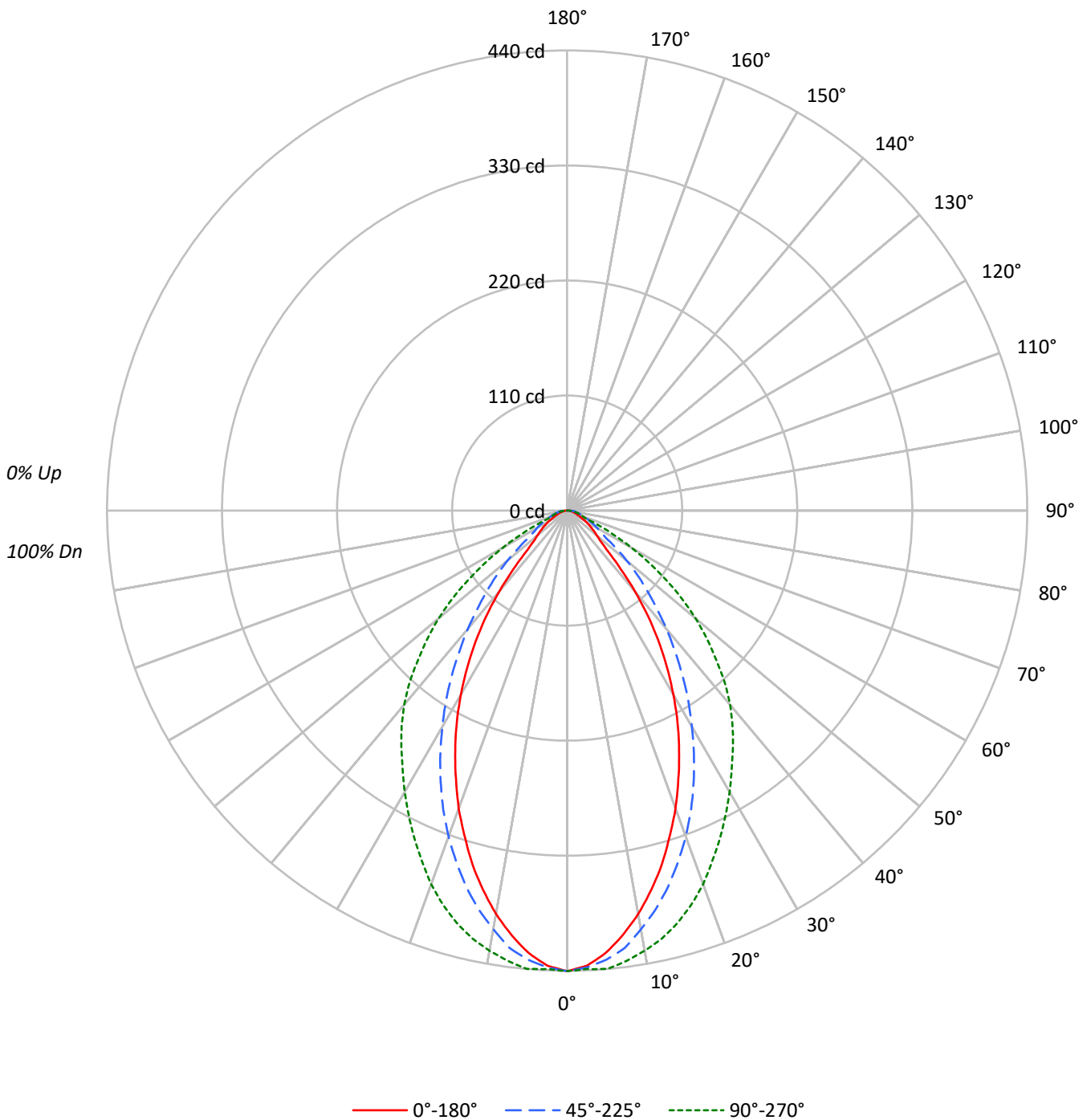
Lumens per Lamp: N/A
Luminaire Lumens: 591.2 lumens
Efficiency: N/A
Efficacy: 30.2 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.08 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
Input Voltage (V): 120
Input Current (A_{in}): 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	102	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	90	81	74	68	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	60	69	64	60	68	63	59	58
6	79	68	61	55	78	67	60	55	66	59	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	55	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	49	43	39	49	43	39	48	43	39	37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5171	5171	5171
5°	5004	5082	5185
10°	4670	4847	5095
15°	4256	4530	4961
20°	3788	4142	4751
25°	3282	3707	4480
30°	2752	3234	4213
35°	2180	2752	3961
40°	1544	2264	3716
45°	908	1790	3343
50°	680	1359	2928
55°	571	919	2352
60°	463	784	1670
65°	364	670	881
70°	319	584	546
75°	299	544	522
80°	298	595	521
85°	364	889	660

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3343 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.5	6.9
10°-20°	105.3	17.8
20°-30°	134.1	22.7
30°-40°	126.2	21.3
40°-50°	90.9	15.4
50°-60°	52.5	8.9
60°-70°	24.0	4.1
70°-80°	12.0	2.0
80°-90°	5.7	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°	280.0	47.4
0°-40°	406.2	68.7
0°-60°	549.5	93.0
0°-90°	591.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	591.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	440	440	440	440	440	
5°	424	432	431	436	440	39
15°	350	363	373	393	408	98
25°	253	266	286	318	346	116
35°	152	165	192	236	276	94
45°	55	68	108	162	201	46
55°	28	29	45	85	115	25
65°	13	19	24	27	32	13
75°	7	13	12	12	12	7
85°	3	6	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°	440.4	440.4	440.4	440.4	440.4
2.5°	435.5	440.9	437.1	437.7	438.8
5°	424.5	431.6	431.1	435.5	439.9
7.5°	409.2	417.4	421.8	428.4	434.4
10°	391.7	401.0	406.5	418.5	427.3
12.5°	371.5	383.5	390.6	406.5	419.1
15°	350.1	362.7	372.6	393.4	408.1
17.5°	326.1	339.7	352.3	376.9	395.0
20°	303.1	316.2	331.5	358.3	380.2
22.5°	277.9	292.1	309.6	338.1	362.7
25°	253.3	266.4	286.1	317.9	345.8
27.5°	228.7	241.8	262.6	297.6	328.2
30°	203.0	216.6	238.5	277.4	310.7
32.5°	177.8	190.9	215.6	257.7	292.7
35°	152.1	165.2	192.0	236.3	276.3
37.5°	126.9	140.6	169.0	218.8	259.9
40°	100.7	115.4	147.7	200.8	242.4
42.5°	76.0	91.9	126.4	182.2	223.2
45°	54.7	68.4	107.8	161.9	201.3
47.5°	42.7	49.8	90.8	141.1	181.1
50°	37.2	38.3	74.4	122.0	160.3
52.5°	32.3	33.4	58.5	103.9	138.4
55°	27.9	29.0	44.9	85.3	114.9
57.5°	23.5	25.2	37.2	67.8	92.5
60°	19.7	21.9	33.4	52.0	71.1
62.5°	15.9	19.7	28.4	38.3	50.9
65°	13.1	18.6	24.1	26.8	31.7
67.5°	10.9	17.0	20.2	19.1	18.6
70°	9.3	15.3	17.0	15.3	15.9
72.5°	7.7	14.2	14.2	13.1	13.1
75°	6.6	12.6	12.0	11.5	11.5
77.5°	5.5	10.9	10.4	9.8	9.3
80°	4.4	8.8	8.8	8.2	7.7
82.5°	3.8	7.1	7.1	7.1	6.0
85°	2.7	6.0	6.6	6.0	4.9
87.5°	2.2	5.5	5.5	4.9	3.3
90°	0.0	0.0	0.0	0.0	0.0



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	5.69	7.00	6.05	7.32	7.63	13.04	14.36	13.41	14.67	14.99
	3H	7.07	8.24	7.45	8.57	8.94	13.27	14.44	13.65	14.77	15.14
	4H	7.63	8.72	8.03	9.07	9.45	13.39	14.48	13.79	14.83	15.21
	6H	8.06	9.07	8.48	9.44	9.83	13.50	14.50	13.91	14.87	15.27
	8H	8.24	9.19	8.67	9.58	9.98	13.55	14.50	13.98	14.89	15.30
	12H	8.39	9.30	8.82	9.68	10.11	13.61	14.52	14.04	14.90	15.33
4H	2H	6.79	7.88	7.19	8.23	8.61	13.00	14.09	13.40	14.44	14.82
	3H	8.44	9.34	8.86	9.74	10.14	13.36	14.25	13.77	14.66	15.06
	4H	9.26	10.06	9.69	10.48	10.92	13.56	14.36	13.99	14.77	15.22
	6H	9.89	10.58	10.36	11.03	11.50	13.78	14.47	14.25	14.92	15.39
	8H	10.13	10.77	10.60	11.22	11.69	13.89	14.53	14.36	14.98	15.45
	12H	10.34	10.91	10.82	11.39	11.87	14.01	14.59	14.50	15.07	15.54
8H	4H	9.70	10.34	10.17	10.79	11.26	13.59	14.24	14.06	14.69	15.16
	6H	10.61	11.14	11.11	11.64	12.12	13.92	14.45	14.42	14.95	15.43
	8H	11.03	11.51	11.55	12.02	12.51	14.11	14.59	14.63	15.10	15.59
	12H	11.44	11.86	11.96	12.36	12.93	14.36	14.78	14.87	15.28	15.85
12H	4H	9.75	10.33	10.24	10.81	11.28	13.58	14.15	14.07	14.64	15.11
	6H	10.75	11.22	11.27	11.74	12.23	13.94	14.42	14.46	14.93	15.42
	8H	11.28	11.70	11.80	12.20	12.77	14.19	14.62	14.71	15.11	15.68