

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: P1059327

Luminaire Tested: S123RDRP-S560D950-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
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: S123RDRP-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

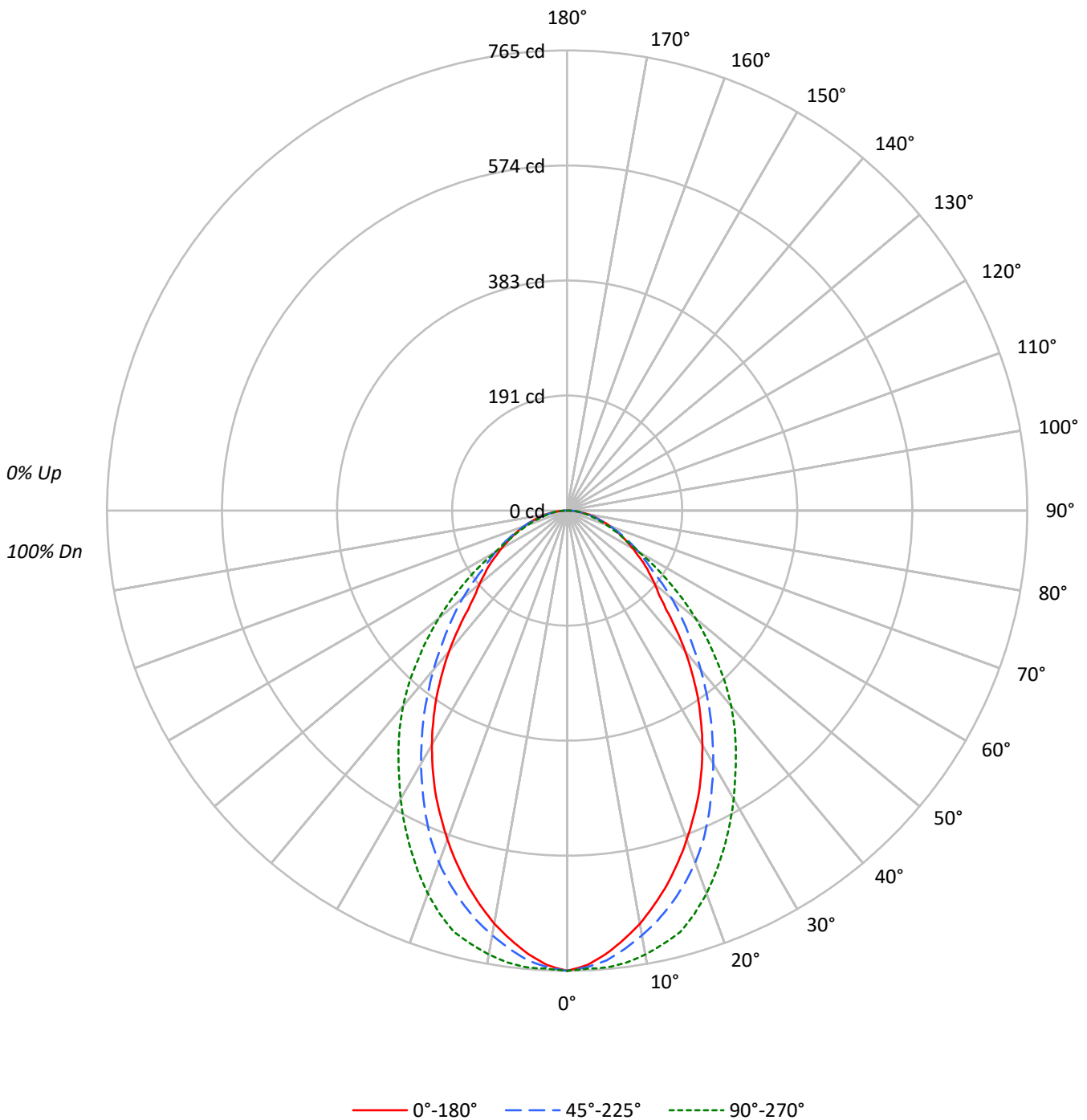
Lumens per Lamp: N/A
Luminaire Lumens: 1344.4 lumens
Efficiency: N/A
Efficacy: 68.6 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.1 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36
10	58	46	39	34	57	45	38	34	45	38	34	44	38	33	43	37	33

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

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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	14.81	16.27	15.18	16.59	16.90	15.88	17.35	16.25	17.66	17.97
	3H	16.51	17.82	16.89	18.15	18.51	16.97	18.28	17.35	18.61	18.97
	4H	17.16	18.39	17.56	18.74	19.12	17.37	18.60	17.77	18.95	19.33
	6H	17.67	18.80	18.08	19.17	19.56	17.68	18.81	18.09	19.18	19.57
	8H	17.84	18.92	18.27	19.31	19.71	17.81	18.89	18.24	19.28	19.68
	12H	17.96	19.00	18.40	19.38	19.81	17.93	18.97	18.37	19.35	19.78
4H	2H	15.41	16.64	15.81	16.99	17.37	16.29	17.51	16.69	17.86	18.24
	3H	17.34	18.36	17.75	18.76	19.16	17.60	18.62	18.02	19.02	19.42
	4H	18.15	19.07	18.59	19.49	19.93	18.12	19.04	18.56	19.46	19.90
	6H	18.80	19.60	19.26	20.04	20.50	18.56	19.35	19.01	19.80	20.26
	8H	19.02	19.77	19.49	20.21	20.68	18.75	19.49	19.21	19.94	20.40
	12H	19.20	19.86	19.68	20.34	20.81	18.93	19.59	19.41	20.07	20.54
8H	4H	18.39	19.14	18.86	19.58	20.05	18.37	19.11	18.83	19.56	20.03
	6H	19.18	19.79	19.68	20.29	20.76	18.92	19.53	19.42	20.02	20.50
	8H	19.49	20.04	20.01	20.55	21.04	19.19	19.75	19.71	20.26	20.75
	12H	19.76	20.25	20.27	20.74	21.31	19.49	19.98	20.00	20.47	21.03
12H	4H	18.40	19.07	18.89	19.55	20.02	18.40	19.06	18.88	19.54	20.01
	6H	19.21	19.77	19.73	20.28	20.77	18.97	19.52	19.48	20.03	20.52
	8H	19.59	20.08	20.10	20.57	21.14	19.31	19.80	19.82	20.29	20.86