

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: P1059291

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1059291  
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-S560D927-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: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

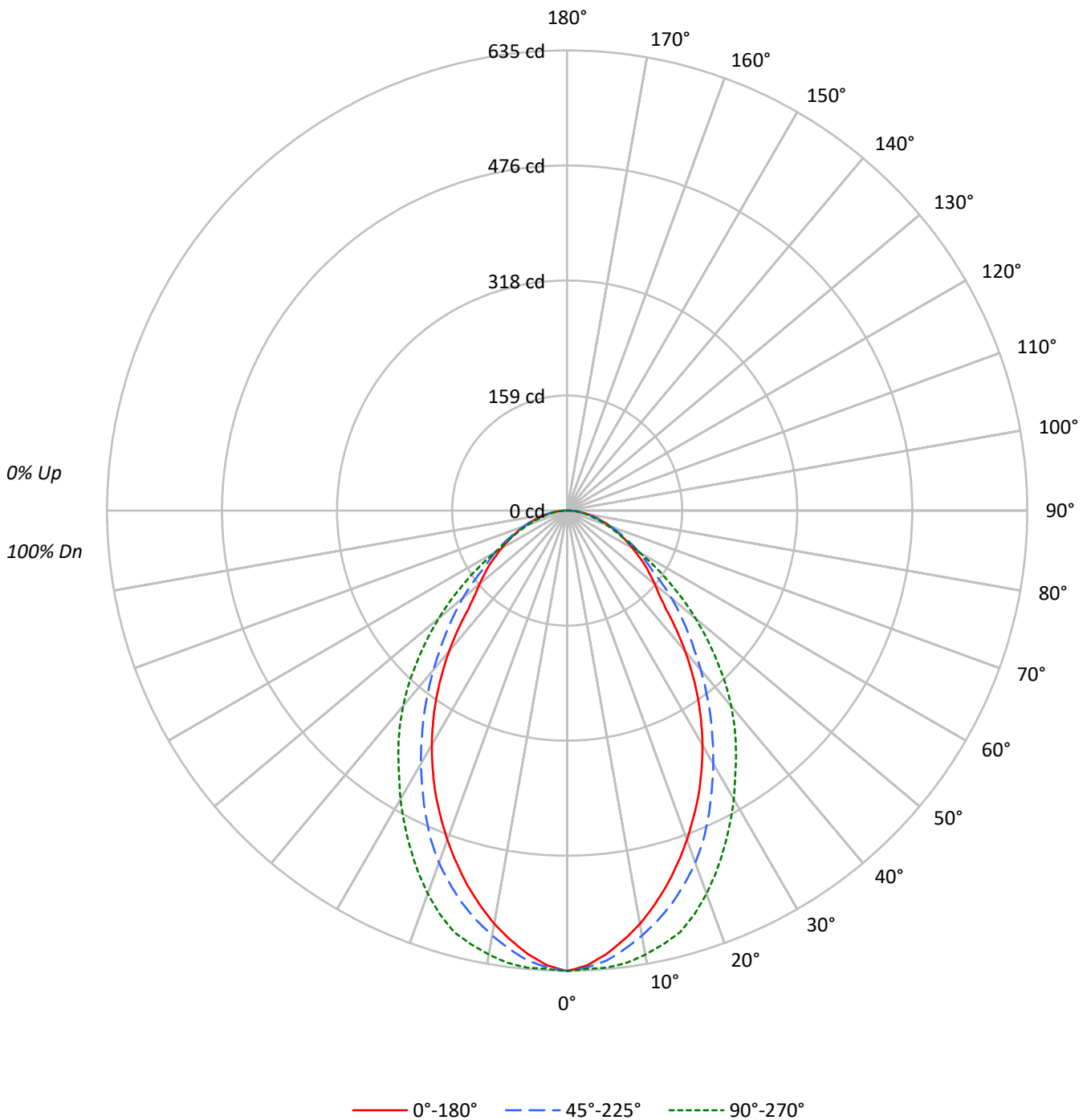
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1116.3 lumens  
Efficiency: N/A  
Efficacy: 57.0 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	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°	7460	7460	7460
5°	7243	7347	7463
10°	6904	7099	7419
15°	6494	6813	7324
20°	6039	6463	7030
25°	5575	5992	6644
30°	5063	5471	6234
35°	4507	4937	5823
40°	3889	4399	5397
45°	3213	3894	4839
50°	2886	3436	4225
55°	2676	2932	3503
60°	2466	2670	2684
65°	2295	2415	2248
70°	2160	2197	1971
75°	2033	1960	1738
80°	1920	1772	1630
85°	1846	1994	1846

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4839 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.8	5.3
10°-20°	158.5	14.2
20°-30°	214.5	19.2
30°-40°	220.4	19.7
40°-50°	185.1	16.6
50°-60°	132.7	11.9
60°-70°	84.5	7.6
70°-80°	46.4	4.2
80°-90°	15.5	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°	431.8	38.7
0°-40°	652.2	58.4
0°-60°	970.0	86.9
0°-90°	1116.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1116.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	635	635	635	635	635	
5°	614	626	623	628	633	58
15°	534	549	560	584	602	150
25°	430	447	462	488	513	197
35°	314	331	344	375	406	196
45°	194	210	234	268	291	153
55°	131	133	143	162	171	117
65°	83	88	87	82	81	82
75°	45	49	43	40	38	48
85°	14	14	15	15	14	15
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	635.3	635.3	635.3	635.3	635.3
2.5°	628.2	636.9	630.9	631.5	633.1
5°	614.5	625.5	623.3	627.6	633.1
7.5°	597.6	609.6	610.2	620.5	629.3
10°	579.0	591.6	595.4	611.2	622.2
12.5°	557.1	570.8	579.0	598.7	612.9
15°	534.2	548.9	560.4	584.5	602.5
17.5°	509.0	524.9	539.6	565.3	583.9
20°	483.3	500.3	517.2	541.3	562.6
22.5°	456.5	474.0	491.5	515.0	538.5
25°	430.3	446.7	462.5	487.7	512.8
27.5°	401.8	418.8	432.5	460.3	486.6
30°	373.4	390.4	403.5	432.5	459.8
32.5°	343.9	361.4	373.4	403.5	431.9
35°	314.4	331.3	344.4	375.1	406.2
37.5°	283.2	301.8	314.9	349.4	380.0
40°	253.7	271.2	287.0	323.1	352.1
42.5°	223.1	241.1	259.2	296.3	323.1
45°	193.5	210.5	234.5	268.4	291.4
47.5°	172.2	183.2	211.0	239.5	261.3
50°	158.0	162.4	188.1	213.2	231.3
52.5°	143.8	147.1	164.6	187.5	201.2
55°	130.7	133.4	143.2	162.4	171.1
57.5°	116.5	119.2	127.4	138.3	143.2
60°	105.0	107.2	113.7	115.4	114.3
62.5°	93.5	96.8	100.1	96.2	94.6
65°	82.6	87.5	86.9	82.0	80.9
67.5°	72.7	77.6	74.9	70.0	68.3
70°	62.9	67.8	64.0	59.0	57.4
72.5°	53.6	59.0	53.0	48.7	47.6
75°	44.8	49.2	43.2	39.9	38.3
77.5°	36.6	39.9	34.4	31.7	30.6
80°	28.4	30.6	26.2	24.6	24.1
82.5°	20.8	21.9	19.1	20.2	19.7
85°	13.7	14.2	14.8	15.3	13.7
87.5°	6.6	9.3	9.3	8.7	7.1
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	14.17	15.63	14.53	15.94	16.26	15.24	16.70	15.60	17.01	17.33
	3H	15.86	17.17	16.24	17.50	17.87	16.32	17.63	16.70	17.96	18.32
	4H	16.52	17.75	16.92	18.09	18.47	16.72	17.95	17.12	18.30	18.68
	6H	17.02	18.15	17.43	18.52	18.91	17.03	18.17	17.44	18.53	18.93
	8H	17.19	18.27	17.62	18.66	19.06	17.17	18.25	17.59	18.64	19.04
	12H	17.32	18.35	17.75	18.73	19.16	17.29	18.32	17.72	18.70	19.13
4H	2H	14.77	16.00	15.17	16.35	16.73	15.64	16.87	16.04	17.22	17.60
	3H	16.70	17.71	17.11	18.11	18.52	16.96	17.97	17.37	18.38	18.78
	4H	17.51	18.42	17.94	18.84	19.28	17.48	18.39	17.91	18.81	19.25
	6H	18.15	18.95	18.61	19.39	19.86	17.91	18.70	18.37	19.15	19.61
	8H	18.38	19.12	18.84	19.57	20.03	18.10	18.84	18.56	19.29	19.76
	12H	18.55	19.21	19.03	19.69	20.17	18.28	18.95	18.77	19.43	19.90
8H	4H	17.74	18.49	18.21	18.93	19.40	17.72	18.47	18.19	18.91	19.38
	6H	18.53	19.15	19.03	19.64	20.12	18.27	18.88	18.77	19.38	19.86
	8H	18.84	19.40	19.36	19.91	20.40	18.55	19.10	19.06	19.61	20.10
	12H	19.11	19.60	19.62	20.10	20.66	18.84	19.33	19.35	19.82	20.39
12H	4H	17.76	18.42	18.24	18.90	19.37	17.75	18.41	18.23	18.89	19.36
	6H	18.56	19.12	19.08	19.63	20.12	18.32	18.87	18.84	19.39	19.87
	8H	18.94	19.43	19.45	19.92	20.49	18.66	19.15	19.17	19.64	20.21