

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: P1059300

Luminaire Tested: S123RDRP-S560D930-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059300
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-S560D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

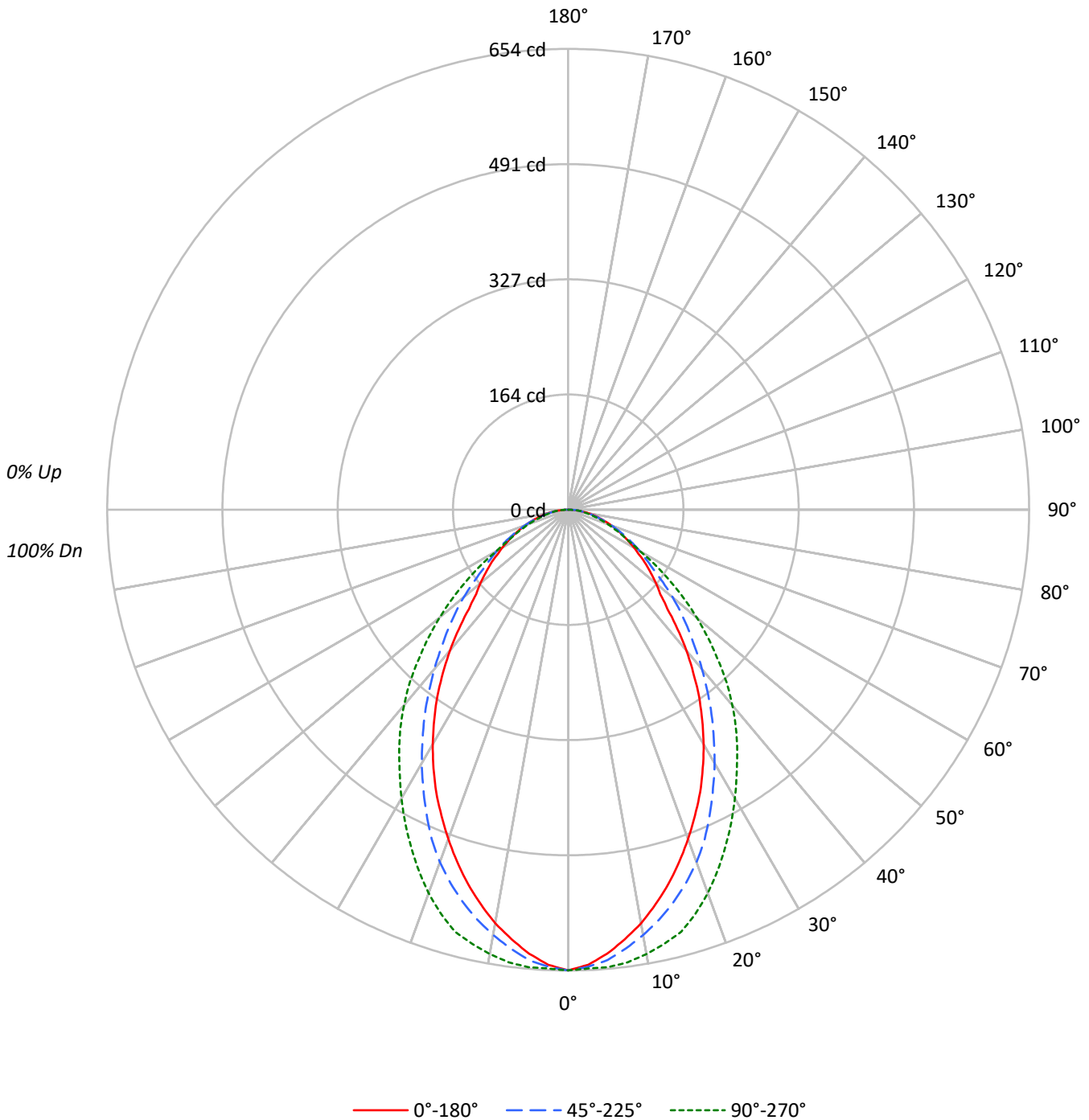
Lumens per Lamp: N/A
Luminaire Lumens: 1148.9 lumens
Efficiency: N/A
Efficacy: 58.6 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.1 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
Input Voltage (V): 120
Input Current (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	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°	7677	7677	7677
5°	7455	7562	7681
10°	7105	7307	7635
15°	6683	7012	7538
20°	6216	6652	7235
25°	5737	6167	6838
30°	5211	5631	6416
35°	4637	5082	5993
40°	4002	4528	5555
45°	3308	4009	4980
50°	2970	3537	4348
55°	2754	3018	3605
60°	2536	2748	2762
65°	2362	2487	2314
70°	2221	2259	2029
75°	2092	2019	1788
80°	1981	1826	1677
85°	1900	2048	1900

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4980 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.6	5.3
10°-20°	163.2	14.2
20°-30°	220.7	19.2
30°-40°	226.8	19.7
40°-50°	190.5	16.6
50°-60°	136.6	11.9
60°-70°	86.9	7.6
70°-80°	47.8	4.2
80°-90°	15.9	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°	444.4	38.7
0°-40°	671.2	58.4
0°-60°	998.3	86.9
0°-90°	1148.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1148.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	654	654	654	654	654	
5°	632	644	642	646	652	59
15°	550	565	577	602	620	154
25°	443	460	476	502	528	203
35°	324	341	354	386	418	201
45°	199	217	241	276	300	157
55°	134	137	147	167	176	120
65°	85	90	90	84	83	85
75°	46	51	44	41	39	49
85°	14	15	15	16	14	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	653.8	653.8	653.8	653.8	653.8
2.5°	646.5	655.5	649.3	649.9	651.6
5°	632.5	643.7	641.5	646.0	651.6
7.5°	615.0	627.4	628.0	638.7	647.7
10°	595.9	608.8	612.8	629.1	640.3
12.5°	573.4	587.4	595.9	616.1	630.8
15°	549.7	564.9	576.8	601.5	620.1
17.5°	523.9	540.2	555.4	581.8	601.0
20°	497.4	514.9	532.3	557.1	579.0
22.5°	469.8	487.9	505.9	530.1	554.2
25°	442.8	459.7	476.0	501.9	527.8
27.5°	413.6	431.0	445.1	473.8	500.8
30°	384.3	401.8	415.3	445.1	473.2
32.5°	353.9	371.9	384.3	415.3	444.5
35°	323.5	341.0	354.5	386.0	418.1
37.5°	291.5	310.6	324.1	359.6	391.1
40°	261.1	279.1	295.4	332.5	362.4
42.5°	229.6	248.1	266.7	305.0	332.5
45°	199.2	216.6	241.4	276.3	299.9
47.5°	177.2	188.5	217.2	246.5	269.0
50°	162.6	167.1	193.6	219.4	238.0
52.5°	148.0	151.4	169.4	193.0	207.1
55°	134.5	137.3	147.4	167.1	176.1
57.5°	119.9	122.7	131.1	142.4	147.4
60°	108.0	110.3	117.0	118.7	117.6
62.5°	96.2	99.6	103.0	99.0	97.3
65°	85.0	90.0	89.5	84.4	83.3
67.5°	74.8	79.9	77.1	72.0	70.3
70°	64.7	69.8	65.8	60.8	59.1
72.5°	55.1	60.8	54.6	50.1	49.0
75°	46.1	50.6	44.5	41.1	39.4
77.5°	37.7	41.1	35.4	32.6	31.5
80°	29.3	31.5	27.0	25.3	24.8
82.5°	21.4	22.5	19.7	20.8	20.3
85°	14.1	14.6	15.2	15.8	14.1
87.5°	6.8	9.6	9.6	9.0	7.3
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	14.27	15.73	14.63	16.04	16.36	15.34	16.80	15.70	17.11	17.43
	3H	15.96	17.28	16.34	17.60	17.97	16.42	17.73	16.80	18.06	18.42
	4H	16.62	17.85	17.02	18.19	18.57	16.82	18.05	17.22	18.40	18.78
	6H	17.12	18.25	17.53	18.62	19.01	17.13	18.27	17.55	18.63	19.03
	8H	17.29	18.37	17.72	18.76	19.16	17.27	18.35	17.70	18.74	19.14
	12H	17.42	18.45	17.85	18.83	19.26	17.39	18.42	17.82	18.80	19.23
4H	2H	14.87	16.10	15.27	16.45	16.83	15.74	16.97	16.14	17.32	17.70
	3H	16.80	17.81	17.21	18.22	18.62	17.06	18.08	17.47	18.48	18.88
	4H	17.61	18.52	18.04	18.94	19.38	17.58	18.49	18.01	18.91	19.35
	6H	18.26	19.05	18.71	19.50	19.96	18.01	18.81	18.47	19.25	19.71
	8H	18.48	19.22	18.94	19.67	20.14	18.20	18.95	18.67	19.39	19.86
	12H	18.65	19.31	19.13	19.79	20.27	18.38	19.05	18.87	19.53	20.00
8H	4H	17.84	18.59	18.31	19.03	19.50	17.82	18.57	18.29	19.01	19.48
	6H	18.63	19.25	19.13	19.74	20.22	18.37	18.99	18.87	19.48	19.96
	8H	18.95	19.50	19.46	20.01	20.50	18.65	19.20	19.16	19.71	20.20
	12H	19.21	19.70	19.73	20.20	20.76	18.94	19.43	19.45	19.92	20.49
12H	4H	17.86	18.52	18.34	19.00	19.47	17.85	18.51	18.33	18.99	19.47
	6H	18.67	19.22	19.18	19.73	20.22	18.42	18.98	18.94	19.49	19.98
	8H	19.04	19.53	19.55	20.02	20.59	18.76	19.25	19.27	19.75	20.31