

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: P1059297

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059297
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-S560D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

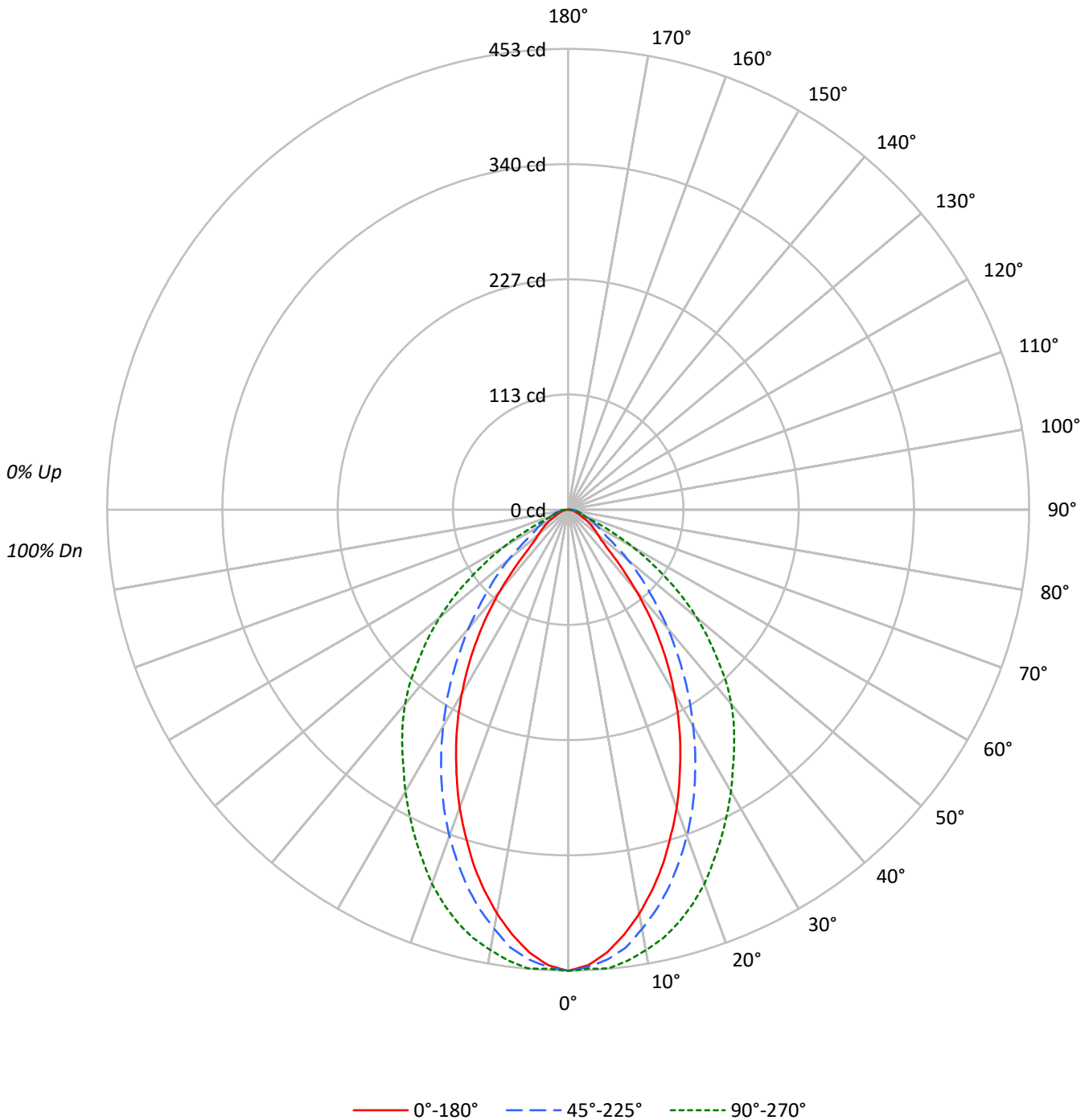
Lumens per Lamp: N/A
Luminaire Lumens: 608.5 lumens
Efficiency: N/A
Efficacy: 31.0 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 1.08 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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°	5323	5323	5323
5°	5150	5230	5336
10°	4806	4988	5243
15°	4380	4661	5106
20°	3898	4264	4890
25°	3378	3816	4610
30°	2832	3329	4336
35°	2243	2833	4075
40°	1588	2330	3823
45°	935	1842	3441
50°	700	1399	3014
55°	588	946	2420
60°	477	806	1719
65°	375	689	909
70°	330	601	560
75°	309	563	535
80°	304	609	534
85°	377	916	687

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3441 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.7	6.9
10°-20°	108.4	17.8
20°-30°	138.1	22.7
30°-40°	129.9	21.3
40°-50°	93.5	15.4
50°-60°	54.0	8.9
60°-70°	24.7	4.1
70°-80°	12.3	2.0
80°-90°	5.8	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°	288.2	47.4
0°-40°	418.0	68.7
0°-60°	565.6	93.0
0°-90°	608.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	608.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	453	453	453	453	453	
5°	437	444	444	448	453	41
15°	360	373	383	405	420	100
25°	261	274	294	327	356	119
35°	156	170	198	243	284	97
45°	56	70	111	167	207	48
55°	29	30	46	88	118	26
65°	14	19	25	28	33	14
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°	453.3	453.3	453.3	453.3	453.3
2.5°	448.2	453.8	449.9	450.4	451.6
5°	436.9	444.2	443.7	448.2	452.7
7.5°	421.2	429.6	434.1	440.9	447.1
10°	403.1	412.7	418.3	430.7	439.7
12.5°	382.3	394.7	402.0	418.3	431.3
15°	360.3	373.3	383.4	404.8	420.0
17.5°	335.6	349.7	362.6	387.9	406.5
20°	311.9	325.4	341.2	368.8	391.3
22.5°	286.0	300.7	318.7	348.0	373.3
25°	260.7	274.2	294.5	327.1	355.8
27.5°	235.4	248.9	270.3	306.3	337.8
30°	208.9	223.0	245.5	285.5	319.8
32.5°	183.0	196.5	221.8	265.2	301.2
35°	156.5	170.0	197.6	243.2	284.3
37.5°	130.6	144.7	174.0	225.2	267.4
40°	103.6	118.8	152.0	206.6	249.4
42.5°	78.3	94.6	130.1	187.5	229.7
45°	56.3	70.4	110.9	166.7	207.2
47.5°	43.9	51.2	93.5	145.3	186.4
50°	38.3	39.4	76.6	125.6	165.0
52.5°	33.2	34.3	60.2	107.0	142.5
55°	28.7	29.8	46.2	87.8	118.2
57.5°	24.2	25.9	38.3	69.8	95.2
60°	20.3	22.5	34.3	53.5	73.2
62.5°	16.3	20.3	29.3	39.4	52.4
65°	13.5	19.1	24.8	27.6	32.7
67.5°	11.3	17.5	20.8	19.7	19.1
70°	9.6	15.8	17.5	15.8	16.3
72.5°	7.9	14.6	14.6	13.5	13.5
75°	6.8	13.0	12.4	11.8	11.8
77.5°	5.6	11.3	10.7	10.1	9.6
80°	4.5	9.0	9.0	8.4	7.9
82.5°	3.9	7.3	7.3	7.3	6.2
85°	2.8	6.2	6.8	6.2	5.1
87.5°	2.3	5.6	5.6	5.1	3.4
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	5.78	7.10	6.14	7.41	7.73	13.14	14.46	13.51	14.77	15.09
	3H	7.17	8.34	7.55	8.67	9.04	13.37	14.54	13.75	14.87	15.24
	4H	7.73	8.82	8.13	9.17	9.55	13.49	14.58	13.89	14.93	15.31
	6H	8.16	9.16	8.58	9.53	9.93	13.60	14.60	14.02	14.97	15.37
	8H	8.34	9.28	8.77	9.68	10.08	13.65	14.60	14.08	14.99	15.40
	12H	8.49	9.40	8.92	9.78	10.21	13.71	14.62	14.15	15.00	15.43
4H	2H	6.88	7.97	7.28	8.32	8.71	13.10	14.19	13.50	14.54	14.92
	3H	8.55	9.44	8.96	9.84	10.25	13.46	14.35	13.87	14.76	15.16
	4H	9.36	10.16	9.80	10.58	11.02	13.66	14.46	14.09	14.87	15.32
	6H	10.00	10.69	10.46	11.13	11.60	13.88	14.57	14.35	15.02	15.49
	8H	10.23	10.87	10.70	11.32	11.79	13.99	14.63	14.46	15.08	15.55
	12H	10.44	11.01	10.92	11.49	11.97	14.12	14.69	14.60	15.17	15.65
8H	4H	9.80	10.45	10.27	10.90	11.37	13.69	14.34	14.16	14.79	15.26
	6H	10.71	11.24	11.21	11.74	12.22	14.02	14.55	14.52	15.05	15.53
	8H	11.13	11.60	11.65	12.12	12.61	14.21	14.69	14.73	15.20	15.69
	12H	11.54	11.96	12.06	12.46	13.03	14.46	14.88	14.98	15.38	15.95
12H	4H	9.86	10.43	10.35	10.91	11.39	13.68	14.26	14.17	14.74	15.21
	6H	10.84	11.32	11.37	11.84	12.33	14.04	14.51	14.56	15.03	15.52
	8H	11.38	11.80	11.89	12.30	12.87	14.29	14.72	14.81	15.21	15.78