

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: P1059060

Luminaire Tested: S123RDRP-S1000D935-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059060
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-66)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S1000D935-X4F0-XX-UDD-BVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

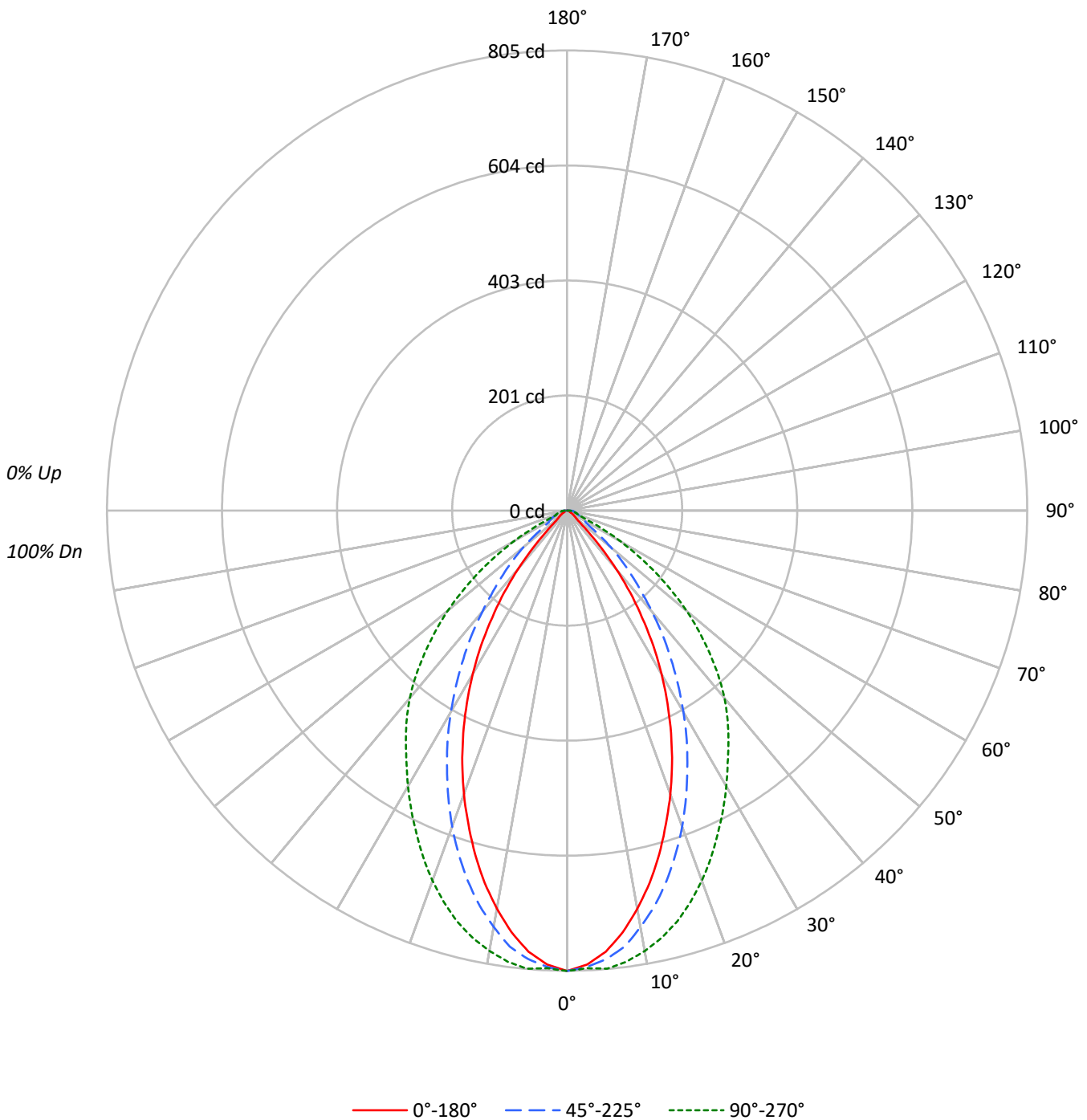
Lumens per Lamp: N/A
Luminaire Lumens: 967.0 lumens
Efficiency: N/A
Efficacy: 27.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	99	94	90	102	97	92	88	94	90	87	91	87	85	88	85	83	81
3	98	90	84	79	96	89	83	79	86	81	77	83	79	76	81	78	75	73
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	57	55
7	76	65	58	53	75	65	58	53	63	57	53	62	56	52	61	56	52	50
8	72	61	54	49	70	60	53	49	59	53	49	58	52	48	57	52	48	47
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	42	40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9457	9457	9457
5°	9132	9281	9482
10°	8430	8821	9325
15°	7565	8157	9045
20°	6599	7354	8610
25°	5567	6444	8077
30°	4477	5510	7548
35°	3277	4537	7054
40°	2045	3536	6570
45°	774	2637	5852
50°	367	1818	4989
55°	283	997	3857
60°	200	845	2536
65°	147	736	1059
70°	144	690	690
75°	191	721	721
80°	284	859	784
85°	566	1428	1145

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5852 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.9	7.6
10°-20°	189.6	19.6
20°-30°	234.7	24.3
30°-40°	210.4	21.8
40°-50°	137.9	14.3
50°-60°	69.0	7.1
60°-70°	26.9	2.8
70°-80°	15.2	1.6
80°-90°	9.3	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°	498.2	51.5
0°-40°	708.6	73.3
0°-60°	915.6	94.7
0°-90°	967.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	967.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	805	805	805	805	805	
5°	775	787	787	796	804	72
15°	622	648	671	716	744	173
25°	430	456	497	568	623	196
35°	229	259	316	412	492	142
45°	47	75	159	272	352	44
55°	14	17	49	133	188	13
65°	5	16	26	35	38	5
75°	4	16	16	16	16	4
85°	4	11	11	11	8	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	805.4	805.4	805.4	805.4	805.4
2.5°	794.8	806.5	799.1	800.1	801.2
5°	774.7	787.4	787.4	795.9	804.4
7.5°	744.0	758.8	769.4	784.2	795.9
10°	707.0	725.0	739.8	766.3	782.1
12.5°	666.8	689.0	708.0	743.0	765.2
15°	622.3	647.7	671.0	715.5	744.0
17.5°	574.7	600.1	630.8	682.6	717.6
20°	528.1	553.5	588.5	646.7	689.0
22.5°	479.4	505.9	542.9	607.5	657.2
25°	429.7	456.2	497.4	568.3	623.4
27.5°	380.0	406.4	453.0	530.2	590.6
30°	330.2	356.7	406.4	489.0	556.7
32.5°	280.5	309.0	360.9	450.9	522.8
35°	228.6	259.3	316.5	411.7	492.1
37.5°	181.0	209.6	274.1	377.8	461.4
40°	133.4	164.0	230.7	345.0	428.6
42.5°	86.8	119.6	191.6	309.0	391.6
45°	46.6	75.1	158.8	272.0	352.4
47.5°	25.4	41.3	128.1	232.8	312.2
50°	20.1	23.3	99.5	199.0	273.1
52.5°	16.9	19.1	70.9	167.2	229.7
55°	13.8	16.9	48.7	133.4	188.4
57.5°	11.6	14.8	38.1	103.7	147.1
60°	8.5	12.7	36.0	76.2	108.0
62.5°	6.4	13.8	31.8	52.9	70.9
65°	5.3	15.9	26.5	34.9	38.1
67.5°	4.2	16.9	23.3	22.2	22.2
70°	4.2	15.9	20.1	19.1	20.1
72.5°	4.2	16.9	18.0	16.9	18.0
75°	4.2	15.9	15.9	15.9	15.9
77.5°	4.2	14.8	14.8	13.8	13.8
80°	4.2	12.7	12.7	12.7	11.6
82.5°	4.2	11.6	11.6	11.6	9.5
85°	4.2	10.6	10.6	10.6	8.5
87.5°	3.2	9.5	10.6	9.5	6.4
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	0.15	1.41	0.52	1.72	2.04	14.41	15.67	14.77	15.98	16.29
	3H	2.48	3.59	2.86	3.92	4.29	14.49	15.60	14.87	15.93	16.30
	4H	3.59	4.62	3.99	4.97	5.36	14.57	15.60	14.97	15.95	16.34
	6H	4.57	5.52	4.99	5.89	6.29	14.67	15.62	15.09	15.99	16.39
	8H	5.05	5.95	5.48	6.34	6.75	14.73	15.63	15.16	16.02	16.42
	12H	5.60	6.46	6.04	6.85	7.28	14.81	15.67	15.24	16.05	16.48
4H	2H	3.42	4.45	3.82	4.80	5.19	14.26	15.30	14.67	15.65	16.03
	3H	5.73	6.57	6.14	6.98	7.38	14.44	15.29	14.85	15.69	16.09
	4H	7.10	7.86	7.54	8.28	8.72	14.59	15.35	15.03	15.77	16.21
	6H	8.18	8.84	8.65	9.28	9.75	14.82	15.47	15.28	15.92	16.39
	8H	8.64	9.25	9.11	9.69	10.17	14.94	15.55	15.41	16.00	16.47
	12H	9.13	9.67	9.61	10.15	10.62	15.12	15.65	15.60	16.14	16.61
8H	4H	8.08	8.69	8.55	9.13	9.61	14.59	15.20	15.06	15.65	16.12
	6H	9.59	10.09	10.10	10.59	11.07	14.93	15.43	15.43	15.92	16.41
	8H	10.36	10.81	10.89	11.33	11.82	15.16	15.61	15.68	16.12	16.62
	12H	11.17	11.56	11.68	12.06	12.63	15.49	15.89	16.01	16.39	16.96
12H	4H	8.25	8.79	8.74	9.27	9.75	14.57	15.11	15.06	15.60	16.07
	6H	9.91	10.36	10.43	10.87	11.37	14.95	15.40	15.47	15.91	16.40
	8H	10.86	11.26	11.37	11.75	12.32	15.25	15.65	15.77	16.15	16.72