

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: P1059213

Luminaire Tested: S123RDRP-S340D930-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059213
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-S340D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

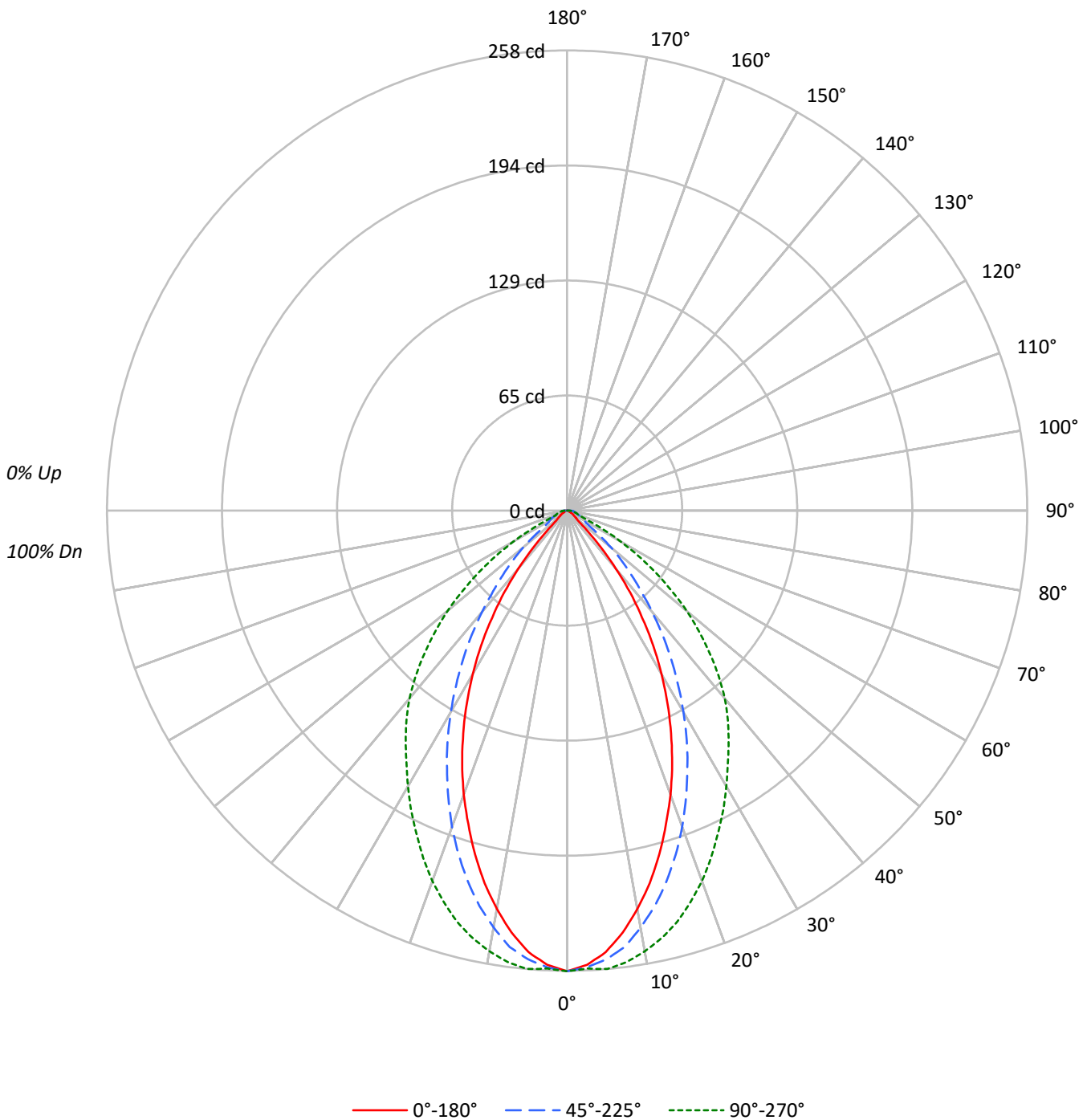
Lumens per Lamp: N/A
Luminaire Lumens: 310.1 lumens
Efficiency: N/A
Efficacy: 24.8 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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	86	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°	3033	3033	3033
5°	2929	2976	3041
10°	2704	2829	2992
15°	2426	2616	2901
20°	2117	2358	2762
25°	1785	2067	2590
30°	1436	1767	2420
35°	1051	1455	2262
40°	656	1134	2108
45°	247	845	1877
50°	117	583	1600
55°	90	319	1237
60°	63	270	813
65°	47	236	339
70°	48	220	220
75°	64	231	231
80°	95	277	250
85°	189	458	364

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1877 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.7	7.6
10°-20°	60.8	19.6
20°-30°	75.3	24.3
30°-40°	67.5	21.8
40°-50°	44.2	14.3
50°-60°	22.1	7.1
60°-70°	8.6	2.8
70°-80°	4.9	1.6
80°-90°	3.0	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°	159.8	51.5
0°-40°	227.3	73.3
0°-60°	293.6	94.7
0°-90°	310.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	310.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	258	258	258	258	258	
5°	248	252	252	255	258	23
15°	200	208	215	230	239	56
25°	138	146	160	182	200	63
35°	73	83	102	132	158	46
45°	15	24	51	87	113	14
55°	4	5	16	43	60	4
65°	2	5	8	11	12	2
75°	1	5	5	5	5	1
85°	1	3	3	3	3	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	258.3	258.3	258.3	258.3	258.3
2.5°	254.9	258.7	256.3	256.6	257.0
5°	248.5	252.5	252.5	255.3	258.0
7.5°	238.6	243.4	246.8	251.5	255.3
10°	226.8	232.5	237.3	245.8	250.9
12.5°	213.9	221.0	227.1	238.3	245.4
15°	199.6	207.7	215.2	229.5	238.6
17.5°	184.3	192.5	202.3	218.9	230.1
20°	169.4	177.5	188.7	207.4	221.0
22.5°	153.8	162.3	174.1	194.8	210.8
25°	137.8	146.3	159.5	182.3	199.9
27.5°	121.9	130.3	145.3	170.1	189.4
30°	105.9	114.4	130.3	156.8	178.5
32.5°	90.0	99.1	115.8	144.6	167.7
35°	73.3	83.2	101.5	132.0	157.8
37.5°	58.0	67.2	87.9	121.2	148.0
40°	42.8	52.6	74.0	110.7	137.5
42.5°	27.8	38.4	61.4	99.1	125.6
45°	14.9	24.1	50.9	87.2	113.0
47.5°	8.1	13.2	41.1	74.7	100.1
50°	6.4	7.5	31.9	63.8	87.6
52.5°	5.4	6.1	22.7	53.6	73.7
55°	4.4	5.4	15.6	42.8	60.4
57.5°	3.7	4.8	12.2	33.3	47.2
60°	2.7	4.1	11.5	24.4	34.6
62.5°	2.0	4.4	10.2	17.0	22.7
65°	1.7	5.1	8.5	11.2	12.2
67.5°	1.4	5.4	7.5	7.1	7.1
70°	1.4	5.1	6.4	6.1	6.4
72.5°	1.4	5.4	5.8	5.4	5.8
75°	1.4	5.1	5.1	5.1	5.1
77.5°	1.4	4.8	4.8	4.4	4.4
80°	1.4	4.1	4.1	4.1	3.7
82.5°	1.4	3.7	3.7	3.7	3.1
85°	1.4	3.4	3.4	3.4	2.7
87.5°	1.0	3.1	3.4	3.1	2.0
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	0.00	0.00	0.00	0.00	0.00	10.46	11.72	10.83	12.03	12.35
	3H	0.00	0.00	0.00	0.02	0.39	10.54	11.65	10.92	11.98	12.35
	4H	0.00	0.73	0.10	1.08	1.46	10.62	11.65	11.02	12.01	12.39
	6H	0.71	1.66	1.12	2.03	2.42	10.72	11.67	11.14	12.04	12.44
	8H	1.20	2.09	1.63	2.49	2.89	10.78	11.68	11.21	12.07	12.48
	12H	1.77	2.62	2.20	3.01	3.44	10.86	11.72	11.30	12.10	12.54
4H	2H	0.00	0.52	0.00	0.87	1.26	10.32	11.35	10.72	11.71	12.09
	3H	1.79	2.64	2.21	3.04	3.45	10.49	11.34	10.91	11.74	12.15
	4H	3.17	3.93	3.61	4.35	4.79	10.64	11.40	11.08	11.82	12.26
	6H	4.28	4.93	4.74	5.38	5.84	10.87	11.52	11.33	11.97	12.44
	8H	4.74	5.35	5.21	5.79	6.27	10.99	11.60	11.46	12.05	12.52
	12H	5.24	5.78	5.73	6.26	6.73	11.17	11.71	11.65	12.19	12.66
8H	4H	4.15	4.76	4.62	5.21	5.68	10.64	11.25	11.11	11.70	12.17
	6H	5.68	6.18	6.19	6.68	7.16	10.98	11.48	11.48	11.98	12.46
	8H	6.45	6.90	6.97	7.41	7.91	11.21	11.66	11.73	12.18	12.67
	12H	7.26	7.65	7.77	8.15	8.72	11.54	11.94	12.06	12.44	13.01
12H	4H	4.32	4.86	4.81	5.35	5.82	10.63	11.17	11.11	11.65	12.12
	6H	5.99	6.44	6.52	6.96	7.45	11.00	11.45	11.52	11.96	12.46
	8H	6.94	7.34	7.45	7.83	8.40	11.31	11.70	11.82	12.20	12.77