

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: P1059142

Luminaire Tested: S123RDRP-S1165D935-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059142
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-29)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S1165D935-X4F0-XX-UDD-SVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

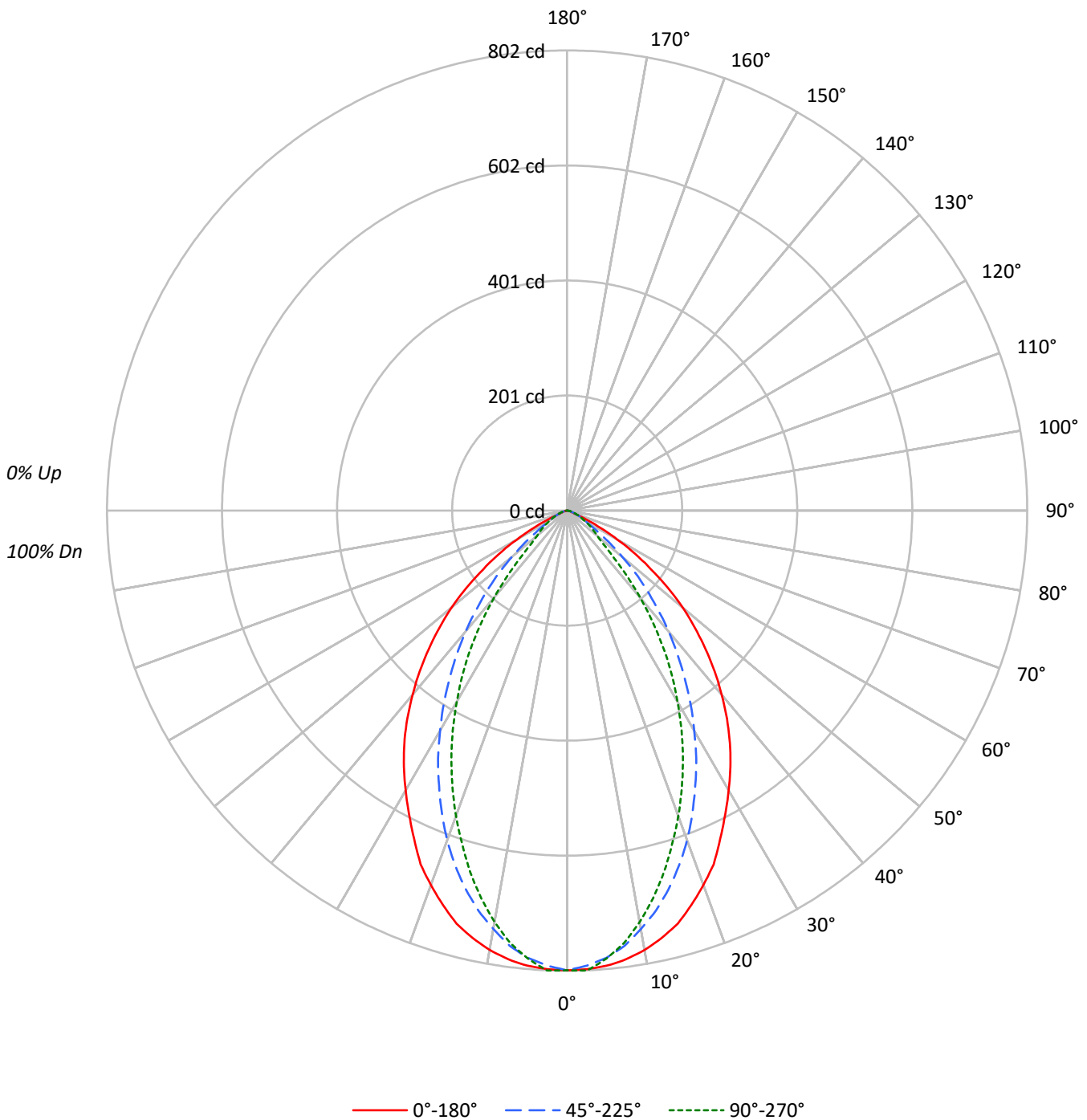
Lumens per Lamp: N/A
Luminaire Lumens: 1034.3 lumens
Efficiency: N/A
Efficacy: 24.7 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 0.85 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	70	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	48	46
9	67	56	49	45	66	56	49	44	55	48	44	54	48	44	53	48	44	42
10	64	52	46	41	63	52	46	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9408	9408	9408
5°	9385	9225	9239
10°	9272	8828	8680
15°	9062	8307	7930
20°	8678	7640	7083
25°	8179	6845	6187
30°	7634	6003	5213
35°	7093	5120	4196
40°	6426	4220	3041
45°	5664	3275	1833
50°	4803	2289	1246
55°	3656	1372	1040
60°	2388	874	815
65°	1000	656	656
70°	340	467	512
75°	281	336	395
80°	169	250	338
85°	162	162	337

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5664 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.0	7.2
10°-20°	193.6	18.7
20°-30°	248.3	24.0
30°-40°	233.0	22.5
40°-50°	162.6	15.7
50°-60°	84.1	8.1
60°-70°	28.7	2.8
70°-80°	8.2	0.8
80°-90°	1.7	0.2
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°	516.0	49.9
0°-40°	749.0	72.4
0°-60°	995.6	96.3
0°-90°	1034.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1034.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	801	801	801	801	801	
5°	796	795	783	786	784	75
15°	745	727	683	661	652	209
25°	631	592	528	492	478	290
35°	495	434	357	311	293	308
45°	341	279	197	136	110	262
55°	179	134	67	52	51	161
65°	36	31	24	22	24	42
75°	6	6	7	9	9	6
85°	1	1	1	1	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	801.2	801.2	801.2	801.2	801.2
2.5°	799.9	801.2	793.7	801.2	802.4
5°	796.2	795.0	782.6	786.3	783.8
7.5°	788.8	785.0	765.2	760.2	760.2
10°	777.6	770.2	740.4	731.7	728.0
12.5°	762.7	752.8	714.3	698.2	692.0
15°	745.4	726.7	683.3	661.0	652.3
17.5°	720.5	695.7	648.6	622.6	608.9
20°	694.5	663.5	611.4	580.4	566.8
22.5°	667.2	630.0	570.5	537.0	522.1
25°	631.3	591.6	528.3	492.4	477.5
27.5°	596.5	554.4	487.4	446.5	431.6
30°	563.0	513.4	442.7	403.1	384.5
32.5°	529.6	473.8	400.6	357.2	339.8
35°	494.8	434.1	357.2	311.3	292.7
37.5°	457.6	395.6	316.2	266.6	244.3
40°	419.2	354.7	275.3	219.5	198.4
42.5°	380.7	317.5	234.4	177.3	152.5
45°	341.1	279.0	197.2	136.4	110.4
47.5°	301.4	240.6	161.2	99.2	83.1
50°	262.9	204.6	125.3	73.2	68.2
52.5°	220.8	169.9	94.3	60.8	59.5
55°	178.6	133.9	67.0	52.1	50.8
57.5°	141.4	104.2	48.4	43.4	42.2
60°	101.7	74.4	37.2	36.0	34.7
62.5°	67.0	50.8	29.8	28.5	28.5
65°	36.0	31.0	23.6	22.3	23.6
67.5°	14.9	17.4	17.4	18.6	18.6
70°	9.9	11.2	13.6	14.9	14.9
72.5°	7.4	8.7	9.9	11.2	11.2
75°	6.2	6.2	7.4	8.7	8.7
77.5°	3.7	5.0	5.0	6.2	7.4
80°	2.5	3.7	3.7	5.0	5.0
82.5°	1.2	2.5	2.5	3.7	3.7
85°	1.2	1.2	1.2	1.2	2.5
87.5°	0.0	0.0	0.0	0.0	1.2
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	14.12	15.38	14.49	15.69	16.01	7.63	8.89	7.99	9.20	9.51
	3H	14.07	15.18	14.45	15.51	15.88	8.40	9.51	8.78	9.84	10.21
	4H	14.02	15.05	14.43	15.40	15.79	8.61	9.64	9.01	9.99	10.37
	6H	13.95	14.90	14.37	15.27	15.66	8.75	9.69	9.16	10.06	10.46
	8H	13.91	14.80	14.34	15.19	15.60	8.78	9.68	9.22	10.07	10.47
	12H	13.87	14.72	14.30	15.10	15.53	8.80	9.65	9.23	10.04	10.47
4H	2H	13.97	15.00	14.37	15.35	15.73	7.88	8.91	8.29	9.27	9.65
	3H	13.95	14.79	14.37	15.19	15.60	8.79	9.63	9.21	10.03	10.44
	4H	13.90	14.64	14.34	15.07	15.51	9.07	9.81	9.50	10.23	10.67
	6H	13.84	14.48	14.31	14.93	15.40	9.28	9.92	9.75	10.37	10.84
	8H	13.79	14.39	14.26	14.84	15.31	9.34	9.94	9.81	10.39	10.86
	12H	13.75	14.27	14.23	14.75	15.23	9.38	9.90	9.87	10.39	10.86
8H	4H	13.79	14.38	14.26	14.83	15.30	9.05	9.64	9.52	10.09	10.56
	6H	13.73	14.21	14.23	14.71	15.19	9.32	9.80	9.82	10.30	10.78
	8H	13.68	14.11	14.20	14.63	15.12	9.43	9.86	9.95	10.38	10.87
	12H	13.64	14.02	14.15	14.52	15.09	9.50	9.88	10.01	10.38	10.95
12H	4H	13.74	14.27	14.23	14.75	15.23	9.01	9.54	9.50	10.02	10.50
	6H	13.67	14.10	14.19	14.62	15.11	9.28	9.72	9.81	10.23	10.73
	8H	13.64	14.02	14.16	14.52	15.09	9.42	9.80	9.94	10.30	10.87