

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: P1057965

Luminaire Tested: S122RDRP-S485D835-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057965
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-56)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S485D835-X4F0-XX-UDD-SVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

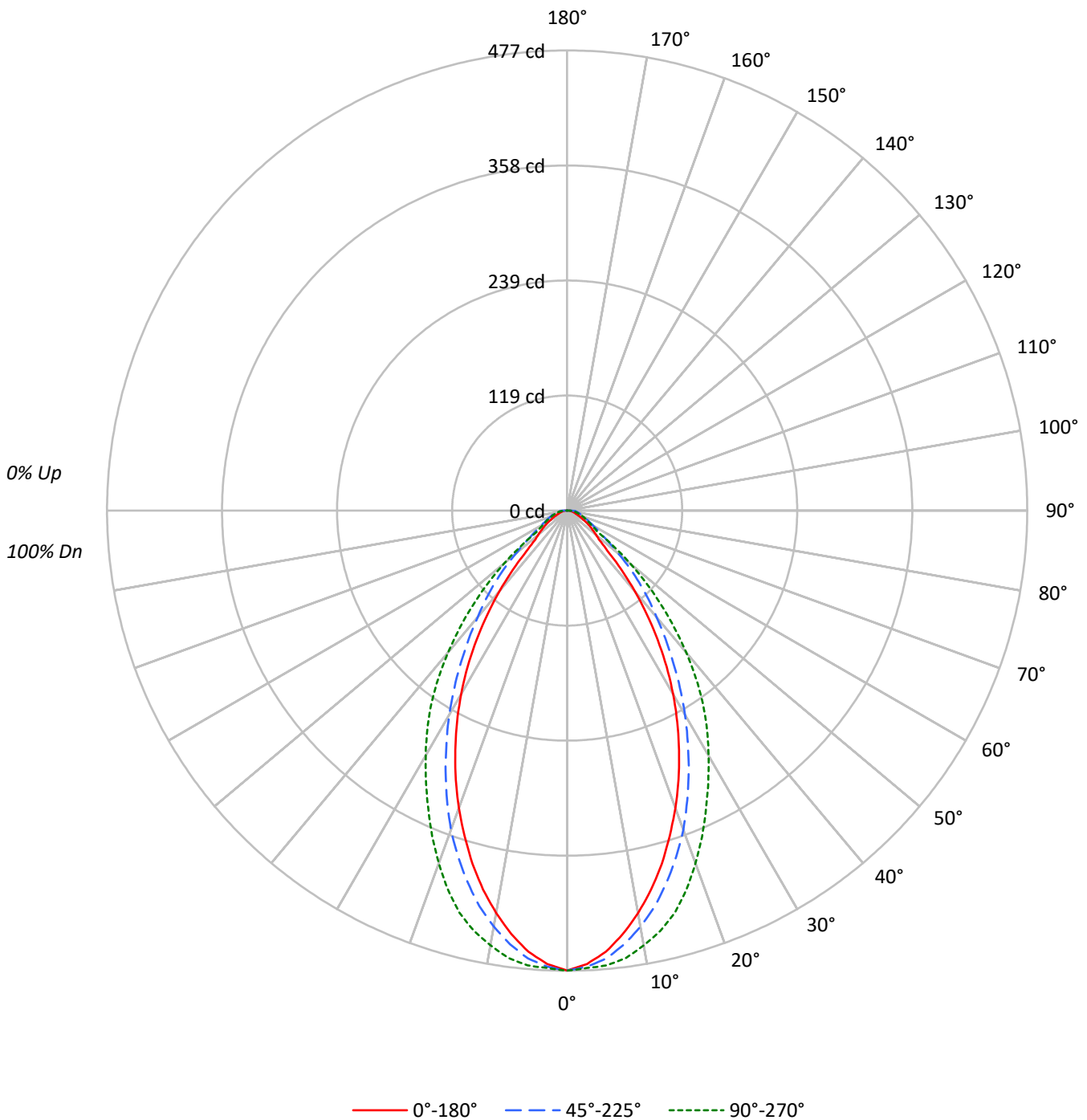
Lumens per Lamp: N/A
Luminaire Lumens: 578.3 lumens
Efficiency: N/A
Efficacy: 29.5 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82
3	97	89	83	78	95	88	82	77	85	80	76	83	78	75	80	77	74
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67
5	86	75	68	63	84	74	68	63	72	67	62	71	65	61	69	64	61
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47
9	67	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8798	8798	8798
5°	8504	8634	8765
10°	7937	8203	8574
15°	7240	7618	8241
20°	6441	6914	7637
25°	5583	6071	6937
30°	4679	5207	6249
35°	3685	4309	5537
40°	2628	3481	4625
45°	1553	2756	3586
50°	1120	1992	2440
55°	933	1435	1232
60°	757	1151	1044
65°	620	1022	961
70°	534	993	917
75°	506	1012	913
80°	531	1201	978
85°	741	1948	1207

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3586 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.7	7.6
10°-20°	112.3	19.4
20°-30°	138.6	24.0
30°-40°	123.3	21.3
40°-50°	78.7	13.6
50°-60°	37.8	6.5
60°-70°	22.2	3.8
70°-80°	14.2	2.5
80°-90°	7.5	1.3
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°	294.7	51.0
0°-40°	417.9	72.3
0°-60°	534.4	92.4
0°-90°	578.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	578.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	477	477	477	477	477	
5°	459	468	466	469	473	43
15°	379	388	399	417	431	106
25°	274	285	298	320	341	125
35°	164	176	191	220	246	102
45°	60	77	106	123	137	50
55°	29	38	45	43	38	26
65°	14	26	23	21	22	14
75°	7	16	14	14	13	8
85°	4	8	9	8	6	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	476.8	476.8	476.8	476.8	476.8
2.5°	470.4	478.2	473.2	473.2	474.6
5°	459.1	467.6	466.1	469.0	473.2
7.5°	442.8	452.0	453.4	461.2	467.6
10°	423.6	433.6	437.8	449.1	457.6
12.5°	402.4	412.3	420.1	434.3	446.3
15°	379.0	388.2	398.8	417.3	431.4
17.5°	353.5	365.5	376.2	395.3	411.6
20°	328.0	339.3	352.1	370.5	388.9
22.5°	301.8	312.4	325.2	344.3	365.5
25°	274.2	284.8	298.2	319.5	340.7
27.5°	247.2	257.9	270.6	294.0	316.7
30°	219.6	230.2	244.4	268.5	293.3
32.5°	192.0	203.3	217.5	243.7	269.9
35°	163.6	176.4	191.3	220.3	245.8
37.5°	136.0	148.8	167.2	195.5	219.6
40°	109.1	124.0	144.5	170.0	192.0
42.5°	82.9	99.2	124.7	145.2	164.4
45°	59.5	77.2	105.6	122.6	137.4
47.5°	45.3	58.1	87.1	100.6	111.2
50°	39.0	46.8	69.4	79.3	85.0
52.5°	34.0	41.1	55.3	60.2	60.2
55°	29.0	37.5	44.6	43.2	38.3
57.5°	24.8	34.0	36.8	31.2	32.6
60°	20.5	31.2	31.2	27.6	28.3
62.5°	17.0	29.0	26.9	24.1	24.8
65°	14.2	25.5	23.4	21.3	22.0
67.5°	11.3	22.7	20.5	19.1	19.1
70°	9.9	20.5	18.4	17.0	17.0
72.5°	8.5	17.7	16.3	14.9	14.9
75°	7.1	15.6	14.2	13.5	12.8
77.5°	6.4	13.5	12.8	11.3	10.6
80°	5.0	11.3	11.3	10.6	9.2
82.5°	4.3	9.9	9.9	9.2	7.8
85°	3.5	8.5	9.2	7.8	5.7
87.5°	2.8	7.8	7.8	6.4	4.3
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	9.23	10.50	9.59	10.82	11.13	9.02	10.30	9.39	10.61	10.93
	3H	10.46	11.59	10.84	11.92	12.29	10.61	11.74	10.99	12.07	12.44
	4H	10.91	11.97	11.31	12.32	12.70	11.33	12.39	11.73	12.74	13.12
	6H	11.29	12.27	11.71	12.64	13.03	11.98	12.95	12.39	13.32	13.72
	8H	11.45	12.37	11.88	12.76	13.17	12.31	13.23	12.74	13.62	14.03
	12H	11.61	12.49	12.04	12.87	13.30	12.61	13.49	13.04	13.87	14.30
4H	2H	9.78	10.84	10.18	11.19	11.57	9.61	10.67	10.02	11.02	11.41
	3H	11.47	12.34	11.88	12.74	13.15	11.45	12.32	11.86	12.72	13.13
	4H	12.27	13.05	12.70	13.47	13.91	12.33	13.11	12.76	13.53	13.97
	6H	12.91	13.59	13.37	14.03	14.50	13.16	13.84	13.63	14.29	14.76
	8H	13.16	13.80	13.63	14.24	14.71	13.59	14.22	14.06	14.67	15.14
	12H	13.41	13.97	13.89	14.45	14.92	13.99	14.55	14.48	15.04	15.51
8H	4H	12.69	13.32	13.15	13.77	14.24	12.74	13.38	13.21	13.82	14.29
	6H	13.66	14.18	14.17	14.68	15.16	13.82	14.34	14.33	14.84	15.32
	8H	14.15	14.62	14.68	15.14	15.63	14.41	14.88	14.94	15.40	15.89
	12H	14.65	15.07	15.17	15.56	16.13	15.02	15.43	15.53	15.93	16.50
12H	4H	12.75	13.31	13.24	13.79	14.27	12.82	13.38	13.30	13.86	14.34
	6H	13.83	14.30	14.35	14.81	15.30	13.99	14.45	14.51	14.97	15.46
	8H	14.47	14.88	14.98	15.37	15.95	14.70	15.11	15.21	15.61	16.18