

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: P1059344

Luminaire Tested: S123RDRP-S775D835-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059344
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-67)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S775D835-X4F0-XX-UDD-WVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

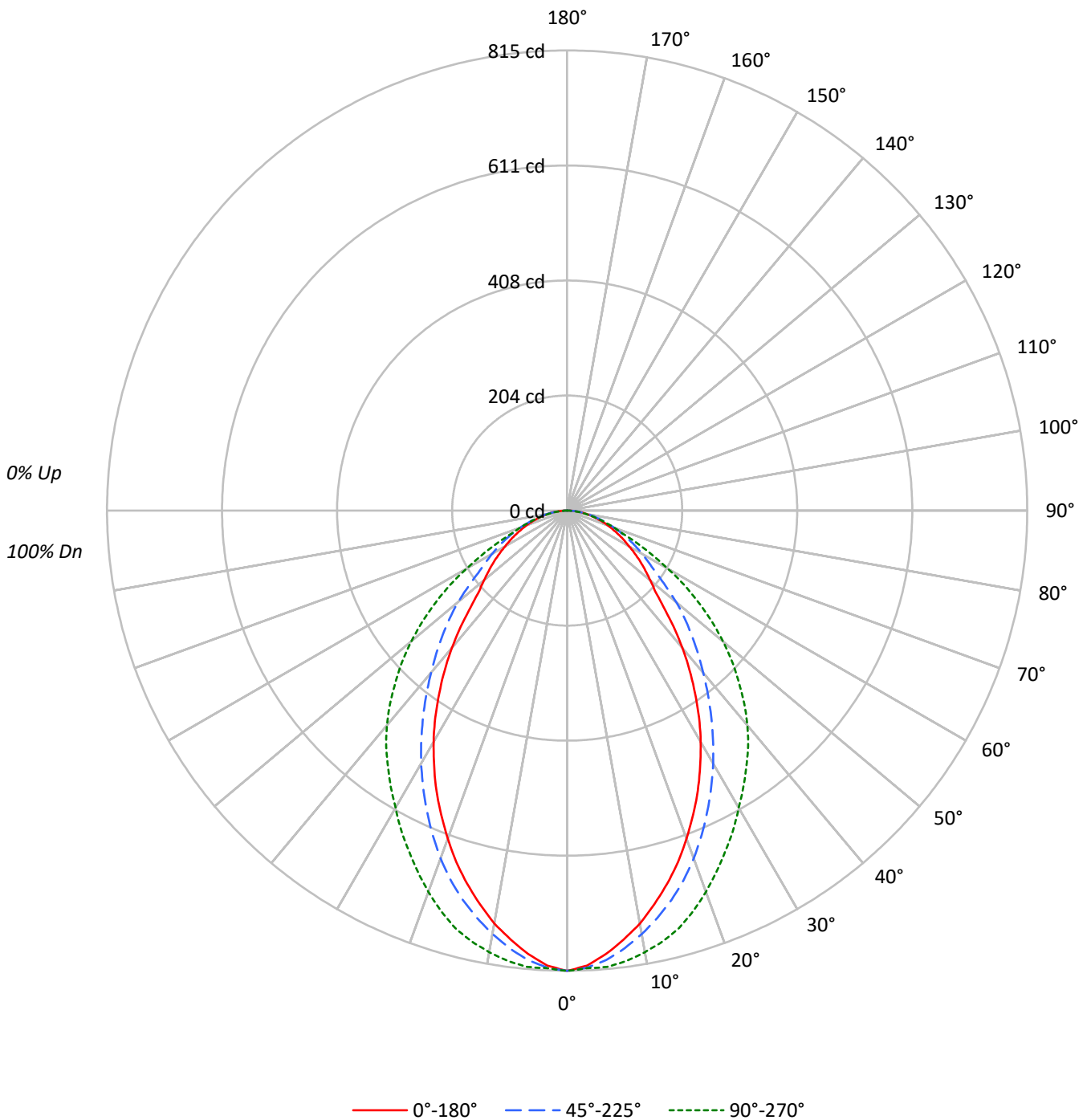
Lumens per Lamp: N/A
Luminaire Lumens: 1472.5 lumens
Efficiency: N/A
Efficacy: 57.1 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.12 / 1.1
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
Input Current (Ain): 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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87
2	102	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57
5	80	69	60	54	78	68	60	54	65	59	54	64	58	53	62	57	53	51
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45
7	70	57	49	44	68	56	49	43	55	48	43	54	47	43	52	47	43	41
8	65	53	45	39	64	52	45	39	51	44	39	50	43	39	48	43	39	37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	39	35	34
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9572	9572	9572
5°	9293	9417	9563
10°	8853	9081	9469
15°	8318	8679	9306
20°	7726	8192	8980
25°	7095	7614	8606
30°	6413	7010	8241
35°	5658	6370	7931
40°	4864	5742	7617
45°	3999	5173	7141
50°	3509	4609	6582
55°	3247	3933	5831
60°	2985	3614	4826
65°	2787	3320	3798
70°	2626	3018	3018
75°	2473	2777	2600
80°	2326	2522	2198
85°	2183	2452	1671

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7141 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.4	5.1
10°-20°	202.1	13.7
20°-30°	274.0	18.6
30°-40°	286.4	19.5
40°-50°	248.4	16.9
50°-60°	184.8	12.6
60°-70°	118.6	8.1
70°-80°	63.6	4.3
80°-90°	19.2	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°	551.4	37.4
0°-40°	837.9	56.9
0°-60°	1271.1	86.3
0°-90°	1472.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1472.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	815	815	815	815	815	
5°	788	802	799	805	811	74
15°	684	700	714	742	766	192
25°	548	565	588	627	664	251
35°	395	414	444	501	553	246
45°	241	259	312	378	430	189
55°	159	162	192	247	285	142
65°	100	109	120	127	137	100
75°	54	63	61	58	57	58
85°	16	20	18	15	12	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	815.2	815.2	815.2	815.2	815.2
2.5°	806.6	818.0	810.4	810.4	811.3
5°	788.4	801.8	798.9	804.6	811.3
7.5°	766.4	780.8	781.7	795.1	804.6
10°	742.5	756.9	761.6	780.8	794.1
12.5°	713.9	730.1	738.7	762.6	781.7
15°	684.2	700.5	713.9	742.5	765.5
17.5°	652.7	668.9	686.2	718.6	743.5
20°	618.3	635.5	655.6	688.1	718.6
22.5°	582.9	601.1	622.1	657.5	691.9
25°	547.6	564.8	587.7	626.9	664.2
27.5°	510.3	528.5	552.4	595.4	637.4
30°	473.0	491.2	517.0	562.9	607.8
32.5°	434.8	453.0	480.7	532.3	581.0
35°	394.7	413.8	444.4	500.8	553.3
37.5°	356.5	374.6	409.0	471.1	526.6
40°	317.3	336.4	374.6	441.5	496.9
42.5°	279.0	298.2	343.1	410.0	464.4
45°	240.8	259.0	311.5	378.4	430.0
47.5°	211.2	224.6	281.9	345.0	396.6
50°	192.1	196.9	252.3	312.5	360.3
52.5°	174.9	178.7	219.8	280.0	323.0
55°	158.6	162.5	192.1	246.6	284.8
57.5°	142.4	147.2	171.1	212.2	246.6
60°	127.1	132.8	153.9	181.6	205.5
62.5°	113.7	120.4	136.7	153.9	170.1
65°	100.3	108.9	119.5	127.1	136.7
67.5°	87.9	97.5	103.2	105.1	106.1
70°	76.5	86.0	87.9	87.9	87.9
72.5°	65.0	75.5	73.6	72.6	71.7
75°	54.5	63.1	61.2	58.3	57.3
77.5°	44.0	51.6	48.7	46.8	44.0
80°	34.4	40.1	37.3	35.4	32.5
82.5°	25.8	29.6	26.8	24.8	22.0
85°	16.2	20.1	18.2	15.3	12.4
87.5°	8.6	11.5	9.6	8.6	4.8
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	14.63	16.12	15.00	16.43	16.75	17.39	18.87	17.76	19.19	19.50
	3H	16.35	17.67	16.72	18.00	18.36	18.41	19.74	18.79	20.07	20.43
	4H	17.01	18.25	17.41	18.60	18.98	18.78	20.02	19.18	20.37	20.75
	6H	17.51	18.66	17.92	19.02	19.42	19.03	20.18	19.44	20.55	20.94
	8H	17.68	18.78	18.11	19.17	19.57	19.10	20.20	19.53	20.59	20.99
	12H	17.81	18.86	18.24	19.24	19.67	19.14	20.19	19.57	20.57	21.00
4H	2H	15.41	16.66	15.81	17.01	17.38	17.66	18.91	18.06	19.26	19.64
	3H	17.34	18.37	17.75	18.77	19.17	18.92	19.95	19.33	20.35	20.75
	4H	18.15	19.08	18.58	19.49	19.93	19.40	20.33	19.84	20.75	21.19
	6H	18.79	19.59	19.25	20.04	20.50	19.78	20.59	20.24	21.03	21.50
	8H	19.01	19.77	19.48	20.21	20.68	19.90	20.65	20.36	21.10	21.56
	12H	19.19	19.86	19.67	20.34	20.81	19.97	20.64	20.45	21.12	21.59
8H	4H	18.47	19.22	18.93	19.67	20.13	19.59	20.35	20.06	20.79	21.26
	6H	19.26	19.88	19.76	20.37	20.85	20.08	20.71	20.58	21.20	21.68
	8H	19.59	20.15	20.10	20.66	21.14	20.26	20.82	20.77	21.33	21.82
	12H	19.86	20.36	20.37	20.85	21.42	20.39	20.89	20.90	21.38	21.94
12H	4H	18.49	19.16	18.97	19.64	20.12	19.61	20.28	20.09	20.76	21.23
	6H	19.31	19.87	19.83	20.38	20.87	20.12	20.68	20.63	21.19	21.68
	8H	19.71	20.20	20.22	20.69	21.26	20.35	20.84	20.86	21.34	21.90