

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: P1059390

Luminaire Tested: S123RDRP-S775D935-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059390
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-64)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S775D935-X4F0-XX-UDD-WVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

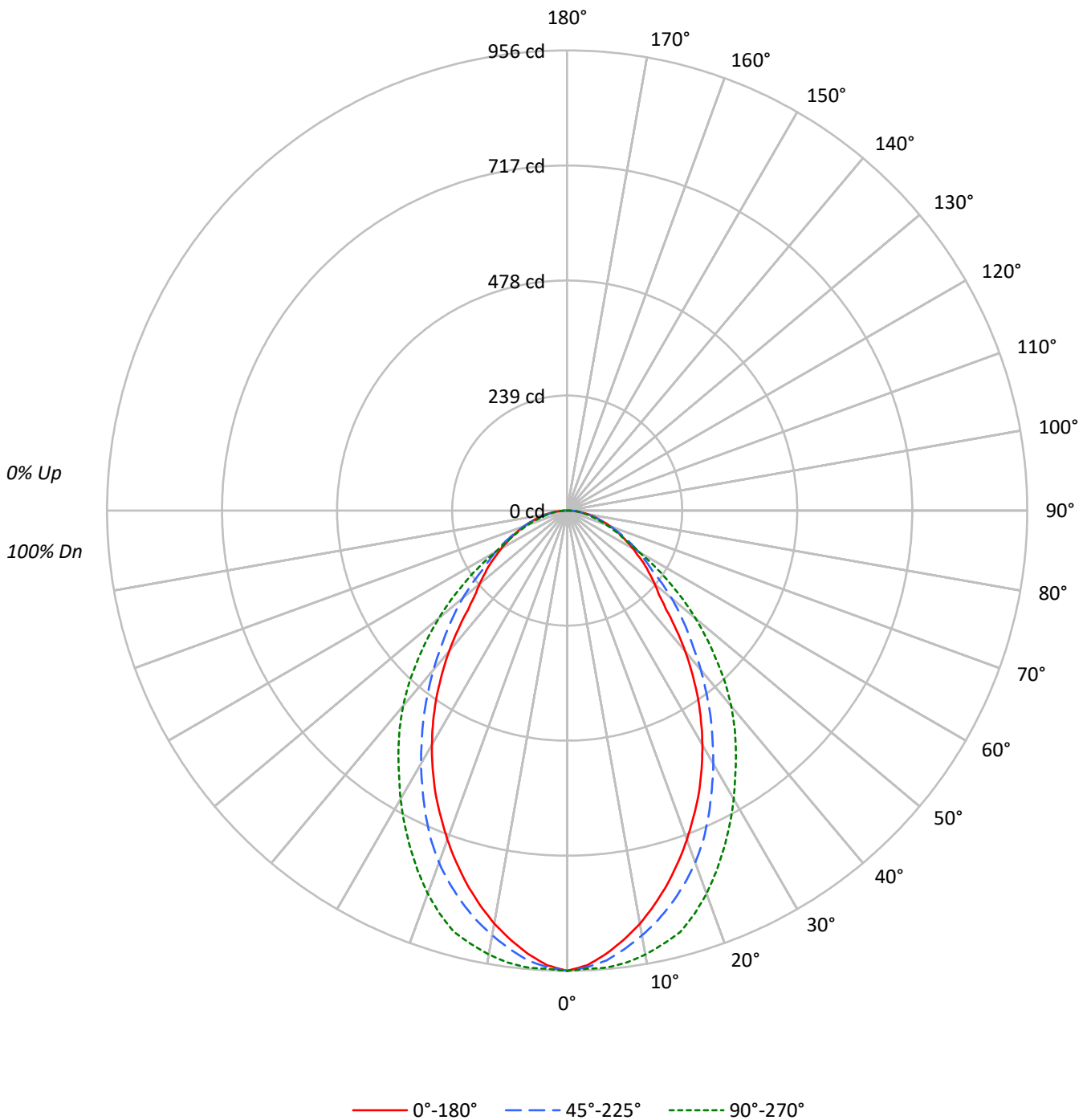
Lumens per Lamp: N/A
Luminaire Lumens: 1680.2 lumens
Efficiency: N/A
Efficacy: 65.1 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.1 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
Input Current (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	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48	46
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	41
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34
10	58	46	39	34	57	45	38	34	45	38	34	44	38	33	43	37	33	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11228	11228	11228
5°	10902	11058	11232
10°	10390	10685	11165
15°	9773	10253	11024
20°	9090	9727	10580
25°	8391	9019	10000
30°	7620	8234	9383
35°	6782	7431	8764
40°	5852	6622	8123
45°	4837	5862	7284
50°	4344	5172	6359
55°	4027	4414	5274
60°	3711	4021	4039
65°	3454	3634	3384
70°	3248	3306	2966
75°	3062	2949	2613
80°	2894	2671	2448
85°	2775	2991	2775

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7284 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.6	5.3
10°-20°	238.6	14.2
20°-30°	322.8	19.2
30°-40°	331.7	19.7
40°-50°	278.6	16.6
50°-60°	199.7	11.9
60°-70°	127.1	7.6
70°-80°	69.9	4.2
80°-90°	23.3	1.4
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°	649.9	38.7
0°-40°	981.6	58.4
0°-60°	1459.9	86.9
0°-90°	1680.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1680.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	956	956	956	956	956	
5°	925	941	938	945	953	87
15°	804	826	843	880	907	225
25°	648	672	696	734	772	297
35°	473	499	518	564	611	294
45°	291	317	353	404	439	230
55°	197	201	216	244	258	176
65°	124	132	131	123	122	124
75°	68	74	65	60	58	72
85°	21	21	22	23	21	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	956.2	956.2	956.2	956.2	956.2
2.5°	945.5	958.6	949.6	950.4	952.9
5°	924.9	941.4	938.1	944.7	952.9
7.5°	899.4	917.5	918.3	934.0	947.1
10°	871.4	890.3	896.1	920.0	936.4
12.5°	838.5	859.1	871.4	901.0	922.4
15°	803.9	826.2	843.4	879.6	906.8
17.5°	766.1	790.0	812.2	850.8	878.8
20°	727.4	752.9	778.4	814.6	846.7
22.5°	687.1	713.4	739.8	775.1	810.5
25°	647.6	672.3	696.1	734.0	771.8
27.5°	604.8	630.3	650.9	692.9	732.4
30°	562.0	587.5	607.3	650.9	692.0
32.5°	517.6	543.9	562.0	607.3	650.1
35°	473.1	498.7	518.4	564.5	611.4
37.5°	426.2	454.2	474.0	525.8	571.9
40°	381.8	408.1	432.0	486.3	529.9
42.5°	335.7	362.9	390.0	446.0	486.3
45°	291.3	316.8	353.0	404.0	438.6
47.5°	259.2	275.7	317.6	360.4	393.3
50°	237.8	244.4	283.1	320.9	348.1
52.5°	216.4	221.4	247.7	282.2	302.8
55°	196.7	200.8	215.6	244.4	257.6
57.5°	175.3	179.4	191.7	208.2	215.6
60°	158.0	161.3	171.2	173.6	172.0
62.5°	140.7	145.6	150.6	144.8	142.4
65°	124.3	131.7	130.8	123.4	121.8
67.5°	109.4	116.8	112.7	105.3	102.9
70°	94.6	102.0	96.3	88.9	86.4
72.5°	80.6	88.9	79.8	73.2	71.6
75°	67.5	74.1	65.0	60.1	57.6
77.5°	55.1	60.1	51.8	47.7	46.1
80°	42.8	46.1	39.5	37.0	36.2
82.5°	31.3	32.9	28.8	30.4	29.6
85°	20.6	21.4	22.2	23.0	20.6
87.5°	9.9	14.0	14.0	13.2	10.7
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	15.59	17.05	15.95	17.36	17.68	16.66	18.12	17.02	18.43	18.75
	3H	17.28	18.59	17.66	18.92	19.29	17.74	19.05	18.12	19.38	19.74
	4H	17.94	19.17	18.34	19.52	19.90	18.14	19.37	18.54	19.72	20.10
	6H	18.44	19.57	18.85	19.94	20.33	18.45	19.59	18.87	19.95	20.35
	8H	18.61	19.69	19.04	20.08	20.48	18.59	19.67	19.02	20.06	20.46
	12H	18.74	19.77	19.17	20.15	20.58	18.71	19.74	19.14	20.12	20.55
4H	2H	16.19	17.42	16.59	17.77	18.15	17.06	18.29	17.46	18.64	19.02
	3H	18.12	19.13	18.53	19.53	19.94	18.38	19.40	18.79	19.80	20.20
	4H	18.93	19.84	19.36	20.26	20.70	18.90	19.81	19.33	20.23	20.67
	6H	19.58	20.37	20.03	20.82	21.28	19.33	20.13	19.79	20.57	21.03
	8H	19.80	20.54	20.26	20.99	21.46	19.52	20.26	19.98	20.71	21.18
	12H	19.97	20.64	20.45	21.11	21.59	19.70	20.37	20.19	20.85	21.32
8H	4H	19.16	19.91	19.63	20.35	20.82	19.14	19.89	19.61	20.33	20.80
	6H	19.95	20.57	20.45	21.06	21.54	19.69	20.31	20.19	20.80	21.28
	8H	20.27	20.82	20.78	21.33	21.82	19.97	20.52	20.48	21.03	21.52
	12H	20.54	21.02	21.05	21.52	22.08	20.26	20.75	20.77	21.24	21.81
12H	4H	19.18	19.84	19.66	20.32	20.79	19.17	19.83	19.65	20.31	20.78
	6H	19.99	20.54	20.50	21.05	21.54	19.74	20.30	20.26	20.81	21.30
	8H	20.36	20.85	20.87	21.34	21.91	20.08	20.57	20.59	21.06	21.63