

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: P1059384

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1059384  
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-S775D935-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: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

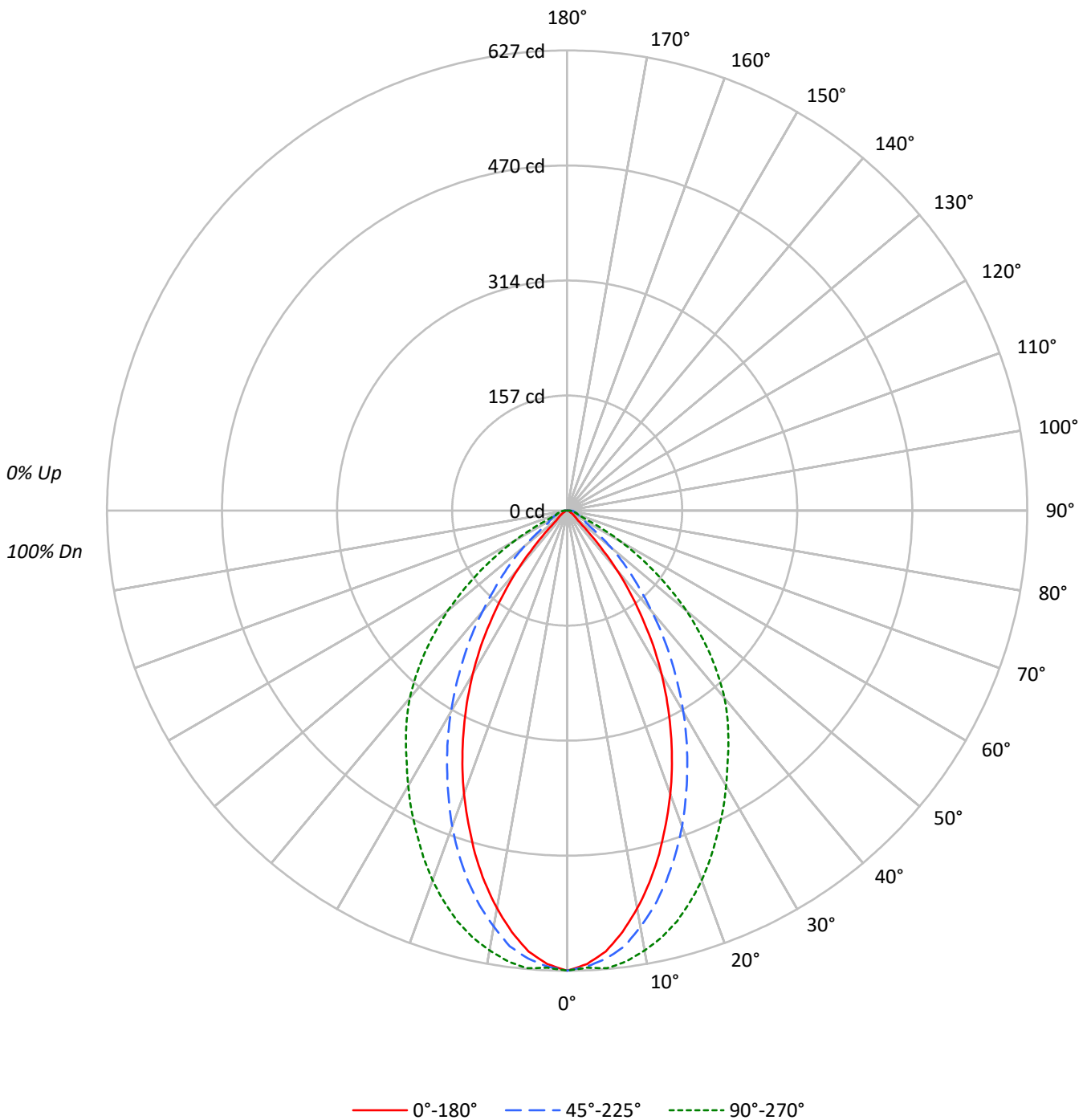
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 752.5 lumens  
Efficiency: N/A  
Efficacy: 29.2 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): 25.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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	87	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°	7360	7360	7360
5°	7107	7222	7378
10°	6560	6864	7257
15°	5887	6348	7039
20°	5136	5722	6700
25°	4333	5015	6285
30°	3485	4289	5874
35°	2550	3531	5490
40°	1591	2751	5114
45°	601	2051	4555
50°	285	1414	3882
55°	219	776	3001
60°	155	658	1973
65°	114	572	822
70°	113	536	536
75°	150	563	563
80°	223	669	615
85°	445	1105	889

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4555 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.5	7.6
10°-20°	147.5	19.6
20°-30°	182.6	24.3
30°-40°	163.7	21.8
40°-50°	107.3	14.3
50°-60°	53.7	7.1
60°-70°	20.9	2.8
70°-80°	11.8	1.6
80°-90°	7.3	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°	387.7	51.5
0°-40°	551.4	73.3
0°-60°	712.5	94.7
0°-90°	752.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	752.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	627	627	627	627	627	
5°	603	613	613	619	626	56
15°	484	504	522	557	579	135
25°	334	355	387	442	485	153
35°	178	202	246	320	383	111
45°	36	58	124	212	274	35
55°	11	13	38	104	147	10
65°	4	12	21	27	30	4
75°	3	12	12	12	12	3
85°	3	8	8	8	7	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	626.8	626.8	626.8	626.8	626.8
2.5°	618.5	627.6	621.8	622.6	623.5
5°	602.9	612.7	612.7	619.3	625.9
7.5°	579.0	590.5	598.7	610.3	619.3
10°	550.2	564.2	575.7	596.3	608.6
12.5°	518.9	536.2	551.0	578.2	595.5
15°	484.3	504.0	522.2	556.7	579.0
17.5°	447.2	467.0	490.9	531.2	558.4
20°	411.0	430.7	457.9	503.2	536.2
22.5°	373.1	393.7	422.5	472.7	511.4
25°	334.4	355.0	387.1	442.3	485.1
27.5°	295.7	316.3	352.5	412.6	459.6
30°	257.0	277.5	316.3	380.5	433.2
32.5°	218.3	240.5	280.8	350.8	406.9
35°	177.9	201.8	246.3	320.4	383.0
37.5°	140.8	163.1	213.3	294.0	359.1
40°	103.8	127.7	179.5	268.5	333.6
42.5°	67.5	93.1	149.1	240.5	304.7
45°	36.2	58.5	123.5	211.7	274.3
47.5°	19.8	32.1	99.7	181.2	243.0
50°	15.6	18.1	77.4	154.8	212.5
52.5°	13.2	14.8	55.2	130.1	178.7
55°	10.7	13.2	37.9	103.8	146.6
57.5°	9.1	11.5	29.6	80.7	114.5
60°	6.6	9.9	28.0	59.3	84.0
62.5°	4.9	10.7	24.7	41.2	55.2
65°	4.1	12.4	20.6	27.2	29.6
67.5°	3.3	13.2	18.1	17.3	17.3
70°	3.3	12.4	15.6	14.8	15.6
72.5°	3.3	13.2	14.0	13.2	14.0
75°	3.3	12.4	12.4	12.4	12.4
77.5°	3.3	11.5	11.5	10.7	10.7
80°	3.3	9.9	9.9	9.9	9.1
82.5°	3.3	9.1	9.1	9.1	7.4
85°	3.3	8.2	8.2	8.2	6.6
87.5°	2.5	7.4	8.2	7.4	4.9
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	0.54	0.00	0.85	1.17	13.54	14.79	13.90	15.11	15.42
	3H	1.63	2.74	2.01	3.07	3.43	13.62	14.73	14.00	15.06	15.43
	4H	2.74	3.77	3.14	4.12	4.50	13.70	14.73	14.10	15.08	15.47
	6H	3.72	4.67	4.14	5.04	5.44	13.80	14.75	14.22	15.12	15.52
	8H	4.21	5.10	4.64	5.50	5.90	13.86	14.76	14.29	15.15	15.56
	12H	4.76	5.62	5.20	6.01	6.44	13.94	14.80	14.37	15.18	15.61
4H	2H	2.54	3.57	2.94	3.92	4.31	13.39	14.43	13.80	14.78	15.16
	3H	4.86	5.71	5.28	6.11	6.52	13.57	14.41	13.98	14.82	15.22
	4H	6.24	6.99	6.68	7.42	7.86	13.72	14.48	14.16	14.90	15.34
	6H	7.32	7.98	7.79	8.42	8.89	13.95	14.60	14.41	15.05	15.51
	8H	7.78	8.39	8.25	8.84	9.31	14.07	14.68	14.54	15.13	15.60
	12H	8.27	8.81	8.76	9.30	9.77	14.25	14.78	14.73	15.27	15.74
8H	4H	7.21	7.82	7.68	8.27	8.74	13.72	14.33	14.19	14.78	15.25
	6H	8.73	9.23	9.24	9.73	10.21	14.06	14.56	14.56	15.05	15.54
	8H	9.51	9.96	10.03	10.47	10.97	14.29	14.74	14.81	15.26	15.75
	12H	10.31	10.71	10.83	11.20	11.78	14.62	15.02	15.14	15.52	16.09
12H	4H	7.39	7.93	7.87	8.41	8.88	13.70	14.24	14.19	14.73	15.20
	6H	9.05	9.50	9.57	10.01	10.51	14.08	14.53	14.60	15.04	15.54
	8H	10.01	10.40	10.52	10.90	11.47	14.39	14.79	14.90	15.28	15.85