

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: P1060587

Luminaire Tested: S124RDRP-S795D927-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060587  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-73)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDRP-S795D927-X4F0-XX-UDD-WVL-W  
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

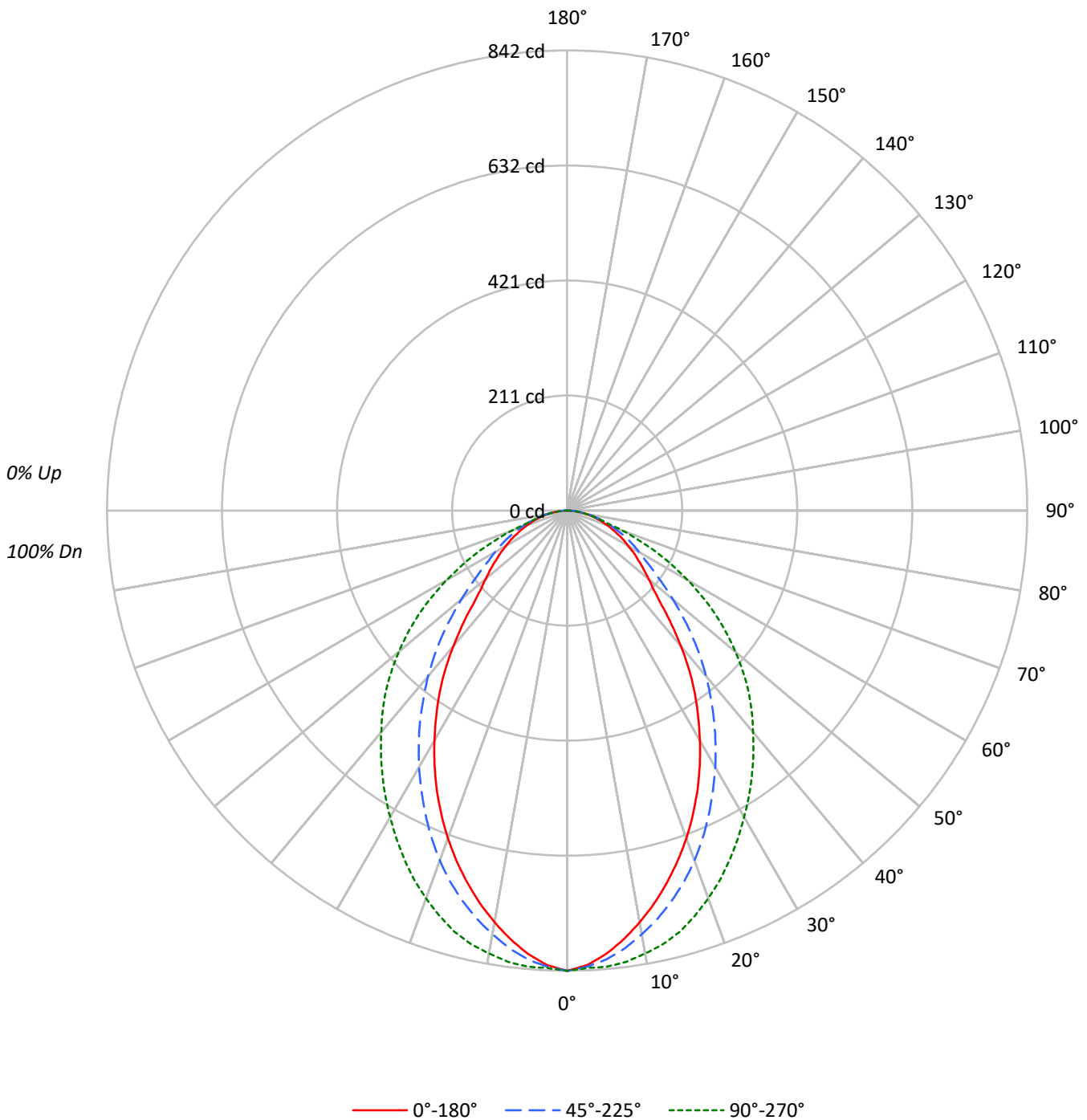
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1545.3 lumens  
Efficiency: N/A  
Efficacy: 59.9 lumens/watt  
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11  
Luminous Opening: Rectangular (W 0.31' 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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87
2	101	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	70	80	74	69	77	72	68	75	70	67	65
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	57
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52	50
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35	33
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32	31

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	7252	7252	7252
5°	7041	7125	7241
10°	6687	6882	7195
15°	6285	6591	7110
20°	5846	6242	6919
25°	5361	5828	6692
30°	4831	5387	6439
35°	4277	4928	6197
40°	3636	4448	5948
45°	2978	3930	5718
50°	2606	3375	5381
55°	2395	2910	4980
60°	2220	2618	4390
65°	2080	2459	3676
70°	1951	2251	2759
75°	1837	2059	2010
80°	1701	1884	1701
85°	1551	1838	1472

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5718 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.8	5.0
10°-20°	209.4	13.6
20°-30°	286.2	18.5
30°-40°	300.8	19.5
40°-50°	261.1	16.9
50°-60°	196.9	12.7
60°-70°	127.6	8.3
70°-80°	65.5	4.2
80°-90°	19.9	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°	573.5	37.1
0°-40°	874.3	56.6
0°-60°	1332.3	86.2
0°-90°	1545.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1545.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	842	842	842	842	842	
5°	815	826	824	831	838	76
15°	705	722	739	773	798	198
25°	564	584	613	660	704	259
35°	407	429	469	531	590	253
45°	244	268	323	403	470	192
55°	160	164	194	275	332	144
65°	102	104	121	146	180	102
75°	55	62	62	63	60	59
85°	16	19	19	18	15	18
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	842.2	842.2	842.2	842.2	842.2
2.5°	832.5	842.9	835.5	837.0	837.7
5°	814.6	825.8	824.3	831.0	837.7
7.5°	791.5	804.9	807.9	821.3	832.5
10°	764.7	779.6	787.0	808.6	822.8
12.5°	736.3	751.2	764.7	792.2	812.4
15°	705.0	722.2	739.3	772.9	797.5
17.5°	672.2	690.1	711.7	748.3	777.3
20°	638.0	655.8	681.2	720.7	755.0
22.5°	601.4	621.6	648.4	690.9	731.1
25°	564.2	584.3	613.4	660.3	704.3
27.5°	525.4	546.3	577.6	629.8	676.7
30°	485.9	508.3	541.8	597.0	647.6
32.5°	445.7	469.5	505.3	564.2	619.3
35°	406.9	429.3	468.8	531.4	589.5
37.5°	366.7	389.0	431.5	499.3	559.7
40°	323.5	348.0	395.7	465.8	529.1
42.5°	283.2	307.8	359.2	433.8	500.1
45°	244.5	267.6	322.7	403.2	469.5
47.5°	214.6	231.0	286.2	373.4	436.7
50°	194.5	202.0	251.9	340.6	401.7
52.5°	176.6	182.6	220.6	307.8	367.4
55°	159.5	164.0	193.8	275.0	331.7
57.5°	144.6	146.8	169.9	242.2	292.9
60°	128.9	131.9	152.0	208.7	254.9
62.5°	116.3	117.8	136.4	176.6	216.9
65°	102.1	104.3	120.7	146.1	180.4
67.5°	89.4	93.2	104.3	119.2	142.3
70°	77.5	82.7	89.4	96.9	109.6
72.5°	66.3	72.3	76.0	79.0	76.8
75°	55.2	61.9	61.9	62.6	60.4
77.5°	44.7	50.7	49.9	49.2	46.2
80°	34.3	39.5	38.0	37.3	34.3
82.5°	25.3	29.1	27.6	26.8	23.1
85°	15.7	19.4	18.6	17.9	14.9
87.5°	7.5	11.2	10.4	9.7	6.7
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	13.39	14.87	13.75	15.19	15.50	17.12	18.61	17.49	18.92	19.24
	3H	15.05	16.39	15.43	16.71	17.08	18.25	19.58	18.63	19.91	20.27
	4H	15.72	16.97	16.12	17.32	17.70	18.55	19.80	18.95	20.14	20.52
	6H	16.23	17.38	16.64	17.75	18.14	18.75	19.90	19.16	20.27	20.66
	8H	16.40	17.50	16.83	17.89	18.29	18.80	19.90	19.23	20.29	20.69
	12H	16.52	17.57	16.95	17.96	18.38	18.83	19.88	19.26	20.27	20.70
4H	2H	14.18	15.43	14.58	15.78	16.15	17.29	18.54	17.69	18.89	19.27
	3H	16.05	17.08	16.46	17.49	17.89	18.62	19.66	19.03	20.06	20.46
	4H	16.86	17.79	17.29	18.20	18.64	19.04	19.97	19.47	20.38	20.82
	6H	17.50	18.31	17.96	18.75	19.21	19.36	20.17	19.82	20.61	21.07
	8H	17.72	18.48	18.19	18.92	19.39	19.45	20.21	19.92	20.65	21.12
	12H	17.89	18.56	18.37	19.04	19.51	19.52	20.20	20.01	20.68	21.15
8H	4H	17.20	17.96	17.67	18.40	18.87	19.17	19.93	19.63	20.37	20.84
	6H	17.99	18.62	18.49	19.11	19.59	19.59	20.21	20.09	20.71	21.18
	8H	18.31	18.87	18.83	19.38	19.87	19.75	20.31	20.26	20.82	21.31
	12H	18.58	19.07	19.09	19.56	20.13	19.89	20.38	20.40	20.87	21.44
12H	4H	17.23	17.91	17.72	18.39	18.86	19.17	19.85	19.66	20.33	20.80
	6H	18.05	18.62	18.57	19.13	19.62	19.61	20.17	20.13	20.68	21.17
	8H	18.44	18.94	18.95	19.43	19.99	19.82	20.32	20.33	20.81	21.37