

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: P1060560

Luminaire Tested: S124RDRP-S795D835-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060560
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-S795D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

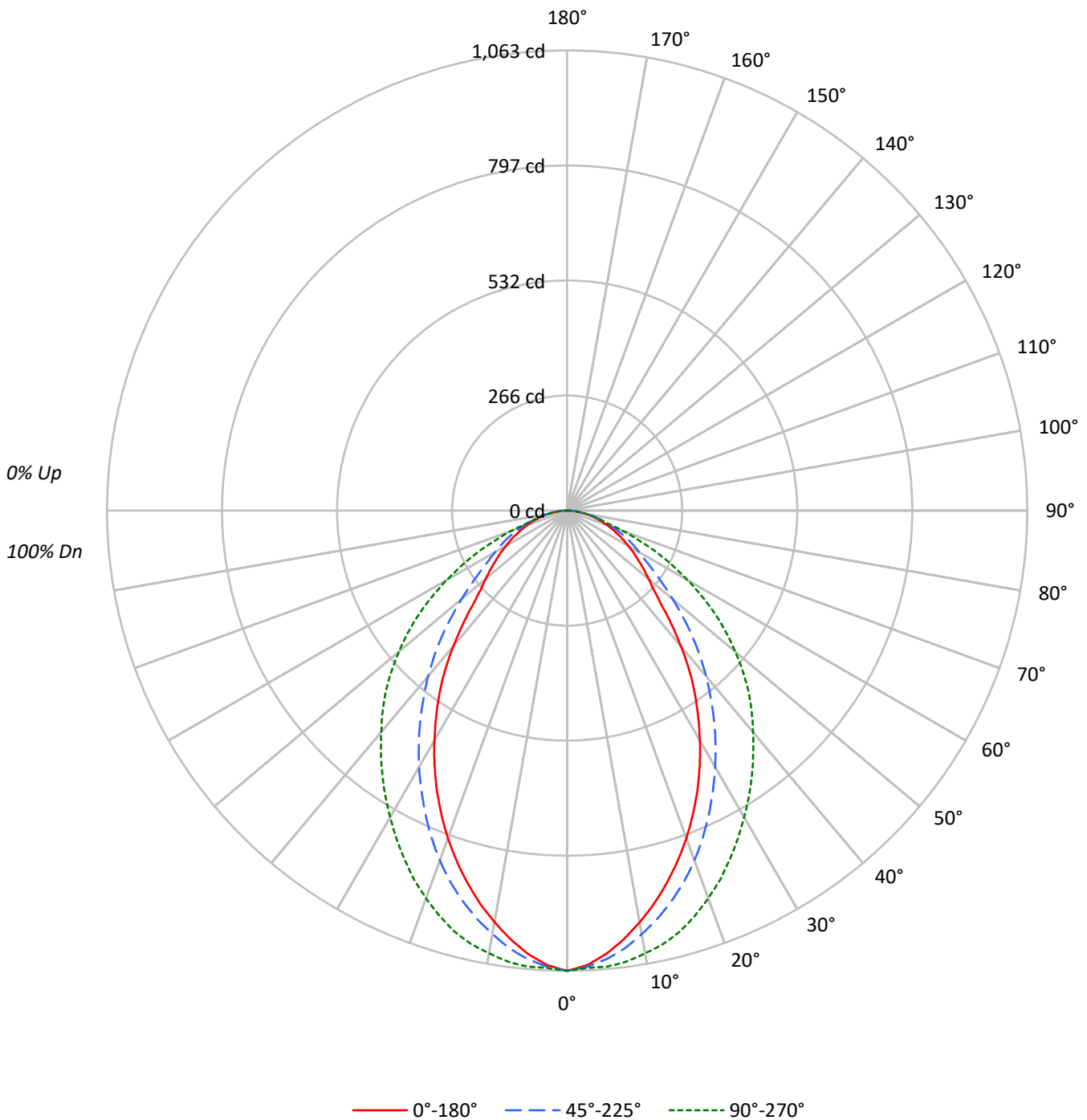
Lumens per Lamp: N/A
Luminaire Lumens: 1950.7 lumens
Efficiency: N/A
Efficacy: 75.6 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
Input Current (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	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°	9154	9154	9154
5°	8889	8994	9141
10°	8441	8687	9081
15°	7934	8320	8975
20°	7380	7880	8733
25°	6767	7357	8448
30°	6099	6801	8130
35°	5400	6221	7823
40°	4590	5616	7509
45°	3758	4961	7218
50°	3289	4260	6793
55°	3022	3672	6286
60°	2804	3305	5542
65°	2626	3105	4640
70°	2462	2843	3482
75°	2316	2598	2535
80°	2147	2380	2147
85°	1956	2322	1857

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7218 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.2	5.0
10°-20°	264.4	13.6
20°-30°	361.3	18.5
30°-40°	379.8	19.5
40°-50°	329.5	16.9
50°-60°	248.6	12.7
60°-70°	161.1	8.3
70°-80°	82.7	4.2
80°-90°	25.1	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°	723.9	37.1
0°-40°	1103.7	56.6
0°-60°	1681.8	86.2
0°-90°	1950.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1950.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1063	1063	1063	1063	1063	
5°	1028	1042	1040	1049	1058	96
15°	890	912	933	976	1007	249
25°	712	738	774	834	889	327
35°	514	542	592	671	744	319
45°	309	338	407	509	593	243
55°	201	207	245	347	419	181
65°	129	132	152	184	228	128
75°	70	78	78	79	76	74
85°	20	24	24	23	19	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1063.1	1063.1	1063.1	1063.1	1063.1
2.5°	1050.9	1064.0	1054.6	1056.5	1057.5
5°	1028.3	1042.4	1040.5	1049.0	1057.5
7.5°	999.1	1016.1	1019.8	1036.8	1050.9
10°	965.3	984.1	993.5	1020.8	1038.6
12.5°	929.5	948.3	965.3	1000.1	1025.5
15°	890.0	911.6	933.3	975.6	1006.7
17.5°	848.6	871.2	898.5	944.6	981.3
20°	805.3	827.9	859.9	909.8	953.0
22.5°	759.2	784.6	818.5	872.1	922.9
25°	712.2	737.6	774.3	833.5	889.1
27.5°	663.3	689.6	729.1	795.0	854.2
30°	613.4	641.6	684.0	753.6	817.6
32.5°	562.6	592.7	637.9	712.2	781.8
35°	513.7	541.9	591.8	670.8	744.2
37.5°	462.9	491.1	544.7	630.3	706.5
40°	408.3	439.4	499.6	588.0	668.0
42.5°	357.5	388.5	453.5	547.5	631.3
45°	308.6	337.7	407.4	509.0	592.7
47.5°	270.9	291.6	361.3	471.3	551.3
50°	245.5	255.0	318.0	429.9	507.1
52.5°	223.0	230.5	278.5	388.5	463.8
55°	201.3	207.0	244.6	347.2	418.7
57.5°	182.5	185.3	214.5	305.8	369.7
60°	162.8	166.5	191.9	263.4	321.8
62.5°	146.8	148.6	172.2	223.0	273.8
65°	128.9	131.7	152.4	184.4	227.7
67.5°	112.9	117.6	131.7	150.5	179.7
70°	97.8	104.4	112.9	122.3	138.3
72.5°	83.7	91.3	96.0	99.7	96.9
75°	69.6	78.1	78.1	79.0	76.2
77.5°	56.4	64.0	63.0	62.1	58.3
80°	43.3	49.9	48.0	47.0	43.3
82.5°	32.0	36.7	34.8	33.9	29.2
85°	19.8	24.5	23.5	22.6	18.8
87.5°	9.4	14.1	13.2	12.2	8.5
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	14.19	15.68	14.56	15.99	16.31	17.93	19.42	18.30	19.73	20.05
	3H	15.86	17.19	16.24	17.52	17.89	19.06	20.39	19.44	20.72	21.08
	4H	16.53	17.78	16.93	18.13	18.51	19.36	20.60	19.76	20.95	21.33
	6H	17.04	18.19	17.45	18.56	18.95	19.56	20.71	19.97	21.08	21.47
	8H	17.21	18.31	17.64	18.70	19.10	19.61	20.71	20.04	21.10	21.50
	12H	17.33	18.38	17.76	18.76	19.19	19.64	20.69	20.07	21.08	21.51
4H	2H	14.99	16.24	15.39	16.59	16.96	18.10	19.35	18.50	19.70	20.08
	3H	16.86	17.89	17.27	18.29	18.70	19.43	20.47	19.84	20.87	21.27
	4H	17.66	18.60	18.10	19.01	19.45	19.85	20.78	20.28	21.19	21.63
	6H	18.31	19.12	18.76	19.56	20.02	20.17	20.98	20.63	21.42	21.88
	8H	18.53	19.29	18.99	19.73	20.20	20.26	21.02	20.73	21.46	21.93
	12H	18.70	19.37	19.18	19.85	20.32	20.33	21.01	20.82	21.49	21.96
8H	4H	18.01	18.77	18.48	19.21	19.68	19.98	20.74	20.44	21.18	21.65
	6H	18.80	19.43	19.30	19.92	20.40	20.40	21.02	20.90	21.52	21.99
	8H	19.12	19.68	19.64	20.19	20.68	20.56	21.12	21.07	21.63	22.12
	12H	19.38	19.88	19.90	20.37	20.94	20.70	21.19	21.21	21.68	22.25
12H	4H	18.04	18.72	18.52	19.20	19.67	19.98	20.66	20.47	21.14	21.61
	6H	18.86	19.43	19.38	19.94	20.42	20.42	20.98	20.94	21.49	21.98
	8H	19.25	19.75	19.76	20.24	20.80	20.63	21.13	21.14	21.62	22.18