

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: P1060563

Luminaire Tested: S124RDRP-S795D840-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060563
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-75)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S795D840-X4F0-XX-UDD-BVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

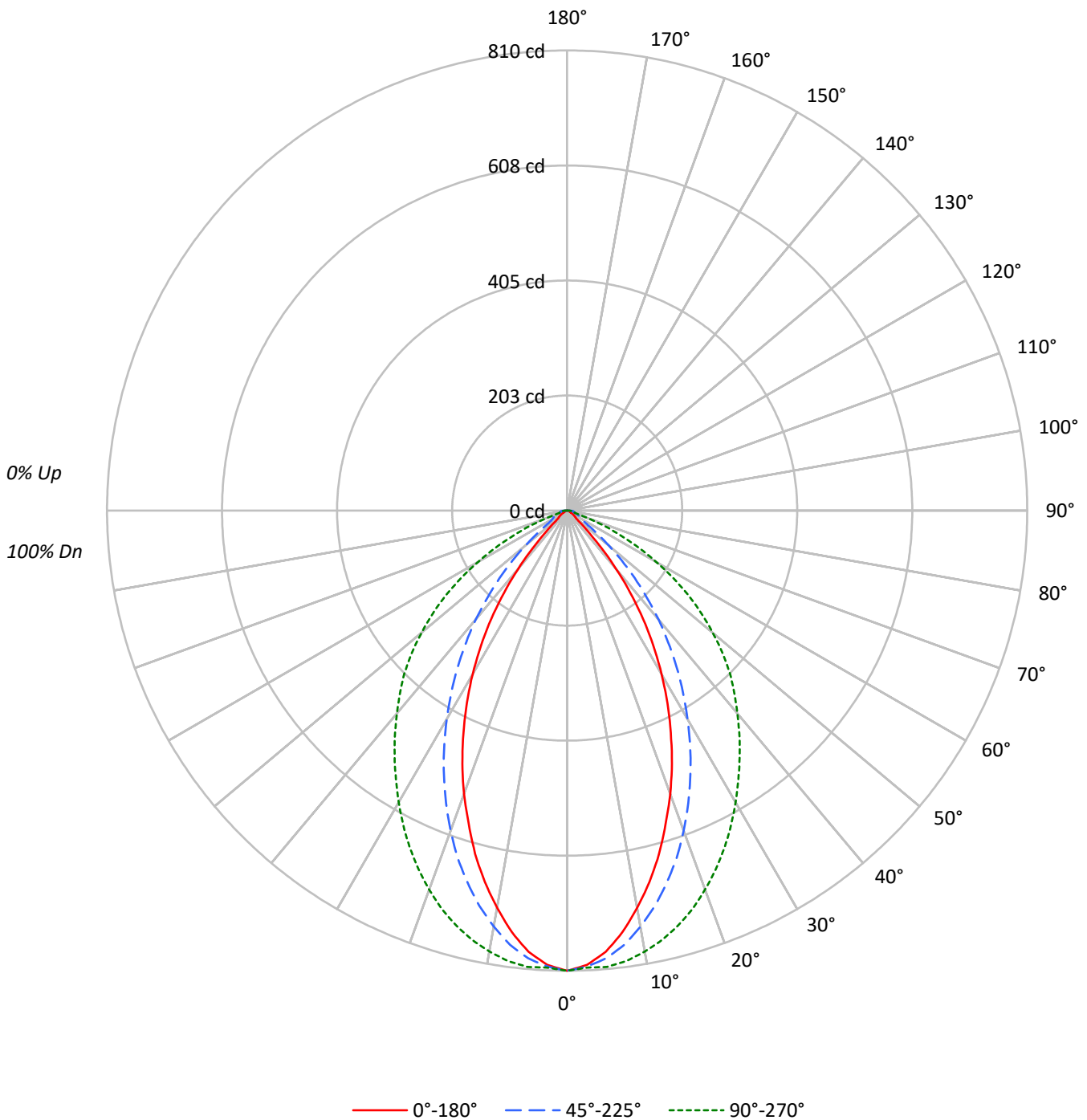
Lumens per Lamp: N/A
Luminaire Lumens: 1020.9 lumens
Efficiency: N/A
Efficacy: 39.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
Input Current (A_{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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72
4	91	82	75	70	89	81	75	70	79	73	69	76	72	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	67	62	71	66	62	69	65	61	59
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56	54
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49
8	71	60	53	48	70	59	52	48	58	52	48	57	51	47	56	51	47	45
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6975	6975	6975
5°	6738	6837	6969
10°	6209	6500	6891
15°	5576	6043	6738
20°	4861	5497	6507
25°	4101	4878	6223
30°	3308	4216	5898
35°	2448	3528	5566
40°	1518	2810	5236
45°	602	2050	4932
50°	268	1286	4482
55°	215	671	3924
60°	148	508	3128
65°	98	503	2150
70°	96	456	1005
75°	126	443	443
80°	188	521	521
85°	375	1037	751

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4932 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.3	7.3
10°-20°	191.8	18.8
20°-30°	242.1	23.7
30°-40°	222.1	21.8
40°-50°	151.2	14.8
50°-60°	82.4	8.1
60°-70°	35.7	3.5
70°-80°	13.0	1.3
80°-90°	8.4	0.8
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°	508.1	49.8
0°-40°	730.2	71.5
0°-60°	963.8	94.4
0°-90°	1020.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1020.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	810	810	810	810	810	
5°	780	790	791	800	806	72
15°	626	647	678	726	756	174
25°	432	462	513	595	655	197
35°	233	267	336	442	530	144
45°	49	83	168	298	405	46
55°	14	15	45	164	261	13
65°	5	7	25	51	106	6
75°	4	12	13	13	13	4
85°	4	9	10	10	8	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	810.0	810.0	810.0	810.0	810.0
2.5°	800.5	810.0	803.3	805.2	805.2
5°	779.5	790.0	791.0	799.5	806.2
7.5°	748.2	763.4	771.0	788.1	799.5
10°	710.1	728.2	743.4	772.9	788.1
12.5°	669.3	690.2	713.0	752.0	773.8
15°	625.5	647.4	677.8	726.3	755.8
17.5°	577.1	603.7	640.8	698.7	734.9
20°	530.5	557.1	599.9	665.5	710.1
22.5°	482.0	509.6	557.1	630.3	683.5
25°	431.6	462.0	513.4	595.1	655.0
27.5°	382.2	414.5	468.7	558.0	624.6
30°	332.7	365.1	424.0	520.0	593.2
32.5°	282.3	315.6	379.3	480.1	560.9
35°	232.9	267.1	335.6	442.1	529.5
37.5°	182.5	218.7	291.9	405.0	498.2
40°	135.0	171.1	250.0	367.9	465.8
42.5°	90.3	126.4	207.2	331.8	435.4
45°	49.4	82.7	168.3	298.5	405.0
47.5°	26.6	45.6	130.2	266.2	370.8
50°	20.0	24.7	96.0	232.0	334.6
52.5°	17.1	19.0	66.5	195.8	298.5
55°	14.3	15.2	44.7	164.5	261.4
57.5°	11.4	12.4	33.3	133.1	221.5
60°	8.6	10.5	29.5	102.7	181.6
62.5°	6.7	8.6	27.6	75.1	143.6
65°	4.8	6.7	24.7	51.3	105.5
67.5°	4.8	7.6	20.9	33.3	71.3
70°	3.8	10.5	18.1	21.9	39.9
72.5°	3.8	11.4	15.2	15.2	15.2
75°	3.8	12.4	13.3	13.3	13.3
77.5°	3.8	11.4	12.4	11.4	11.4
80°	3.8	10.5	10.5	10.5	10.5
82.5°	3.8	9.5	10.5	10.5	8.6
85°	3.8	8.6	10.5	10.5	7.6
87.5°	2.9	8.6	9.5	9.5	5.7
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	0.00	0.00	0.00	0.00	0.00	15.16	16.44	15.52	16.75	17.06
	3H	0.00	0.36	0.00	0.69	1.06	15.53	16.66	15.91	16.99	17.36
	4H	0.45	1.50	0.85	1.85	2.24	15.51	16.56	15.91	16.91	17.30
	6H	1.63	2.59	2.04	2.96	3.36	15.50	16.47	15.91	16.84	17.23
	8H	2.21	3.13	2.65	3.52	3.93	15.50	16.41	15.93	16.81	17.21
	12H	2.88	3.76	3.32	4.14	4.57	15.51	16.39	15.95	16.77	17.20
4H	2H	1.41	2.46	1.81	2.81	3.19	14.97	16.02	15.37	16.37	16.76
	3H	2.99	3.85	3.41	4.26	4.66	15.39	16.25	15.80	16.65	17.05
	4H	4.29	5.06	4.73	5.48	5.92	15.39	16.15	15.82	16.57	17.02
	6H	5.42	6.08	5.88	6.53	6.99	15.43	16.09	15.89	16.54	17.00
	8H	5.93	6.54	6.40	6.99	7.46	15.45	16.07	15.92	16.52	16.99
	12H	6.48	7.02	6.96	7.51	7.98	15.52	16.07	16.01	16.55	17.02
8H	4H	5.37	5.99	5.84	6.44	6.91	15.30	15.91	15.77	16.36	16.83
	6H	6.92	7.42	7.42	7.92	8.40	15.38	15.88	15.88	16.38	16.86
	8H	7.72	8.18	8.25	8.70	9.19	15.46	15.91	15.98	16.43	16.92
	12H	8.56	8.96	9.07	9.46	10.03	15.63	16.03	16.15	16.53	17.10
12H	4H	5.56	6.11	6.05	6.59	7.07	15.26	15.80	15.75	16.29	16.76
	6H	7.28	7.73	7.80	8.25	8.74	15.35	15.80	15.87	16.32	16.81
	8H	8.29	8.69	8.80	9.18	9.76	15.49	15.89	16.00	16.38	16.96