

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: P1060617

Luminaire Tested: S124RDRP-S795D950-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060617
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-S795D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

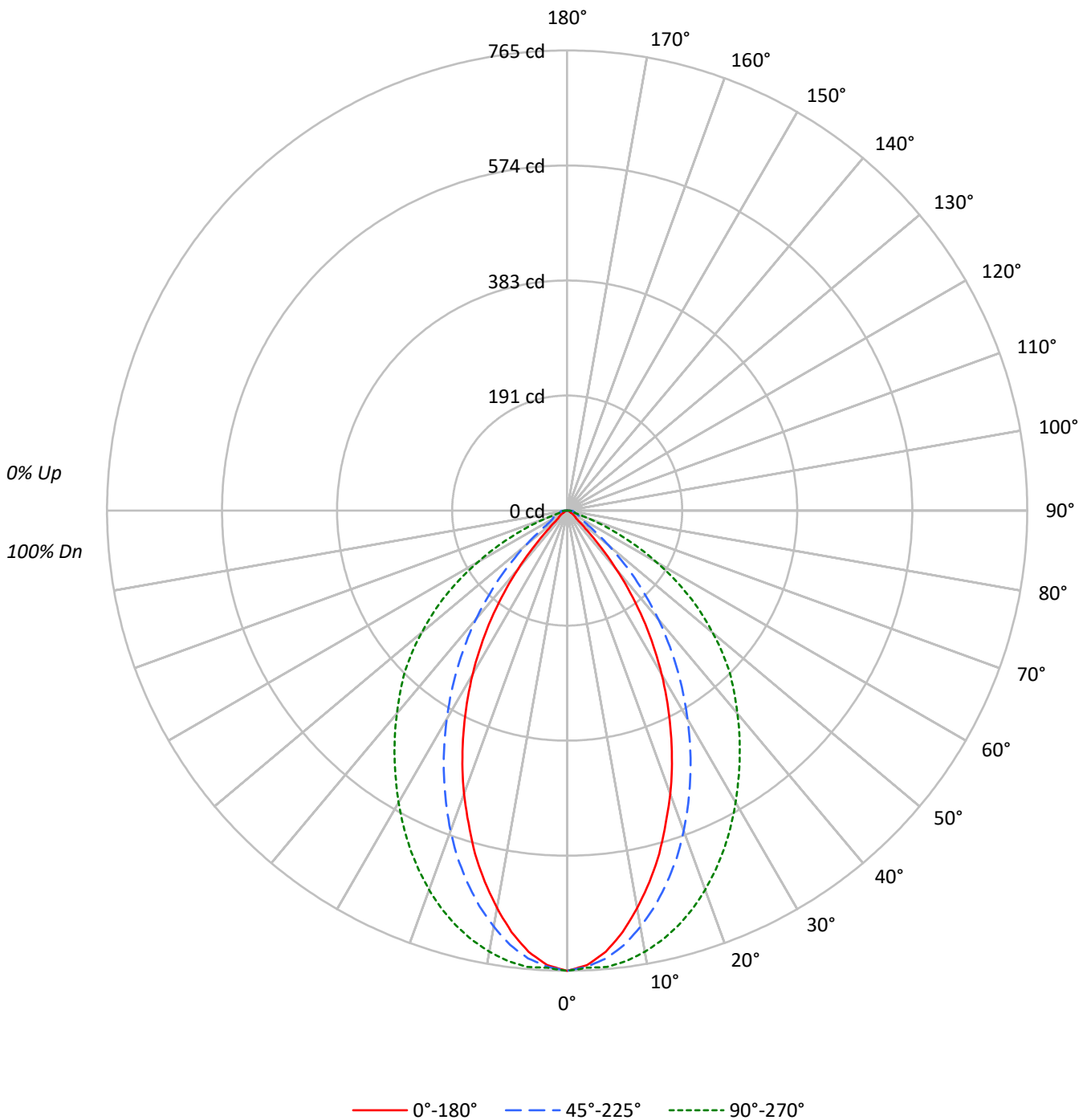
Lumens per Lamp: N/A
Luminaire Lumens: 964.4 lumens
Efficiency: N/A
Efficacy: 37.4 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.96
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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°	6589	6589	6589
5°	6365	6459	6583
10°	5866	6141	6510
15°	5268	5708	6365
20°	4592	5193	6148
25°	3874	4608	5879
30°	3125	3982	5572
35°	2313	3332	5258
40°	1433	2655	4947
45°	569	1936	4659
50°	253	1215	4235
55°	203	634	3708
60°	140	479	2954
65°	92	477	2031
70°	91	431	949
75°	120	419	419
80°	179	491	491
85°	356	978	711

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4659 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.2	7.3
10°-20°	181.2	18.8
20°-30°	228.7	23.7
30°-40°	209.8	21.8
40°-50°	142.9	14.8
50°-60°	77.8	8.1
60°-70°	33.7	3.5
70°-80°	12.3	1.3
80°-90°	7.9	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°	480.0	49.8
0°-40°	689.8	71.5
0°-60°	910.5	94.4
0°-90°	964.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	964.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	765	765	765	765	765	
5°	736	746	747	755	762	68
15°	591	612	640	686	714	164
25°	408	436	485	562	619	186
35°	220	252	317	418	500	136
45°	47	78	159	282	383	43
55°	14	14	42	155	247	12
65°	4	6	23	48	100	5
75°	4	12	13	13	13	4
85°	4	8	10	10	7	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	765.2	765.2	765.2	765.2	765.2
2.5°	756.2	765.2	758.9	760.7	760.7
5°	736.4	746.3	747.2	755.3	761.6
7.5°	706.8	721.2	728.3	744.5	755.3
10°	670.9	687.9	702.3	730.1	744.5
12.5°	632.2	652.0	673.6	710.4	731.0
15°	590.9	611.6	640.3	686.1	714.0
17.5°	545.1	570.3	605.3	660.1	694.2
20°	501.1	526.3	566.7	628.7	670.9
22.5°	455.3	481.4	526.3	595.4	645.7
25°	407.7	436.5	485.0	562.2	618.8
27.5°	361.0	391.6	442.8	527.2	590.0
30°	314.3	344.9	400.5	491.2	560.4
32.5°	266.7	298.2	358.3	453.5	529.9
35°	220.0	252.4	317.0	417.6	500.2
37.5°	172.4	206.6	275.7	382.6	470.6
40°	127.5	161.7	236.2	347.6	440.1
42.5°	85.3	119.4	195.8	313.4	411.3
45°	46.7	78.1	159.0	282.0	382.6
47.5°	25.1	43.1	123.0	251.5	350.3
50°	18.9	23.4	90.7	219.1	316.1
52.5°	16.2	18.0	62.9	185.0	282.0
55°	13.5	14.4	42.2	155.4	247.0
57.5°	10.8	11.7	31.4	125.7	209.3
60°	8.1	9.9	27.8	97.0	171.5
62.5°	6.3	8.1	26.0	70.9	135.6
65°	4.5	6.3	23.4	48.5	99.7
67.5°	4.5	7.2	19.8	31.4	67.4
70°	3.6	9.9	17.1	20.7	37.7
72.5°	3.6	10.8	14.4	14.4	14.4
75°	3.6	11.7	12.6	12.6	12.6
77.5°	3.6	10.8	11.7	10.8	10.8
80°	3.6	9.9	9.9	9.9	9.9
82.5°	3.6	9.0	9.9	9.9	8.1
85°	3.6	8.1	9.9	9.9	7.2
87.5°	2.7	8.1	9.0	9.0	5.4
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	14.96	16.24	15.32	16.55	16.86
	3H	0.00	0.16	0.00	0.49	0.86	15.33	16.47	15.71	16.80	17.16
	4H	0.25	1.30	0.65	1.65	2.04	15.31	16.37	15.72	16.72	17.10
	6H	1.43	2.40	1.85	2.77	3.16	15.30	16.27	15.72	16.64	17.03
	8H	2.02	2.94	2.45	3.33	3.73	15.30	16.22	15.73	16.61	17.01
	12H	2.69	3.57	3.13	3.95	4.38	15.32	16.19	15.75	16.57	17.00
4H	2H	1.22	2.27	1.62	2.62	3.00	14.77	15.82	15.17	16.17	16.56
	3H	2.80	3.66	3.22	4.07	4.47	15.19	16.05	15.60	16.45	16.86
	4H	4.10	4.86	4.53	5.28	5.73	15.19	15.96	15.62	16.38	16.82
	6H	5.22	5.89	5.69	6.33	6.80	15.23	15.89	15.69	16.34	16.81
	8H	5.73	6.35	6.20	6.80	7.27	15.26	15.87	15.73	16.32	16.79
	12H	6.28	6.83	6.77	7.31	7.79	15.32	15.87	15.81	16.35	16.83
8H	4H	5.18	5.80	5.65	6.25	6.72	15.10	15.72	15.57	16.16	16.64
	6H	6.72	7.23	7.23	7.73	8.21	15.18	15.68	15.68	16.18	16.66
	8H	7.53	7.99	8.06	8.50	9.00	15.26	15.72	15.78	16.23	16.72
	12H	8.36	8.77	8.88	9.26	9.83	15.43	15.83	15.95	16.33	16.90
12H	4H	5.37	5.92	5.86	6.40	6.87	15.06	15.61	15.55	16.09	16.57
	6H	7.08	7.53	7.60	8.05	8.54	15.15	15.61	15.67	16.12	16.61
	8H	8.09	8.49	8.61	8.99	9.56	15.29	15.69	15.80	16.19	16.76