

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1061027

Luminaire Tested: S124RDR-H795D950-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061027
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-76)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-H795D950-X4F0-XX-UDD-WVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

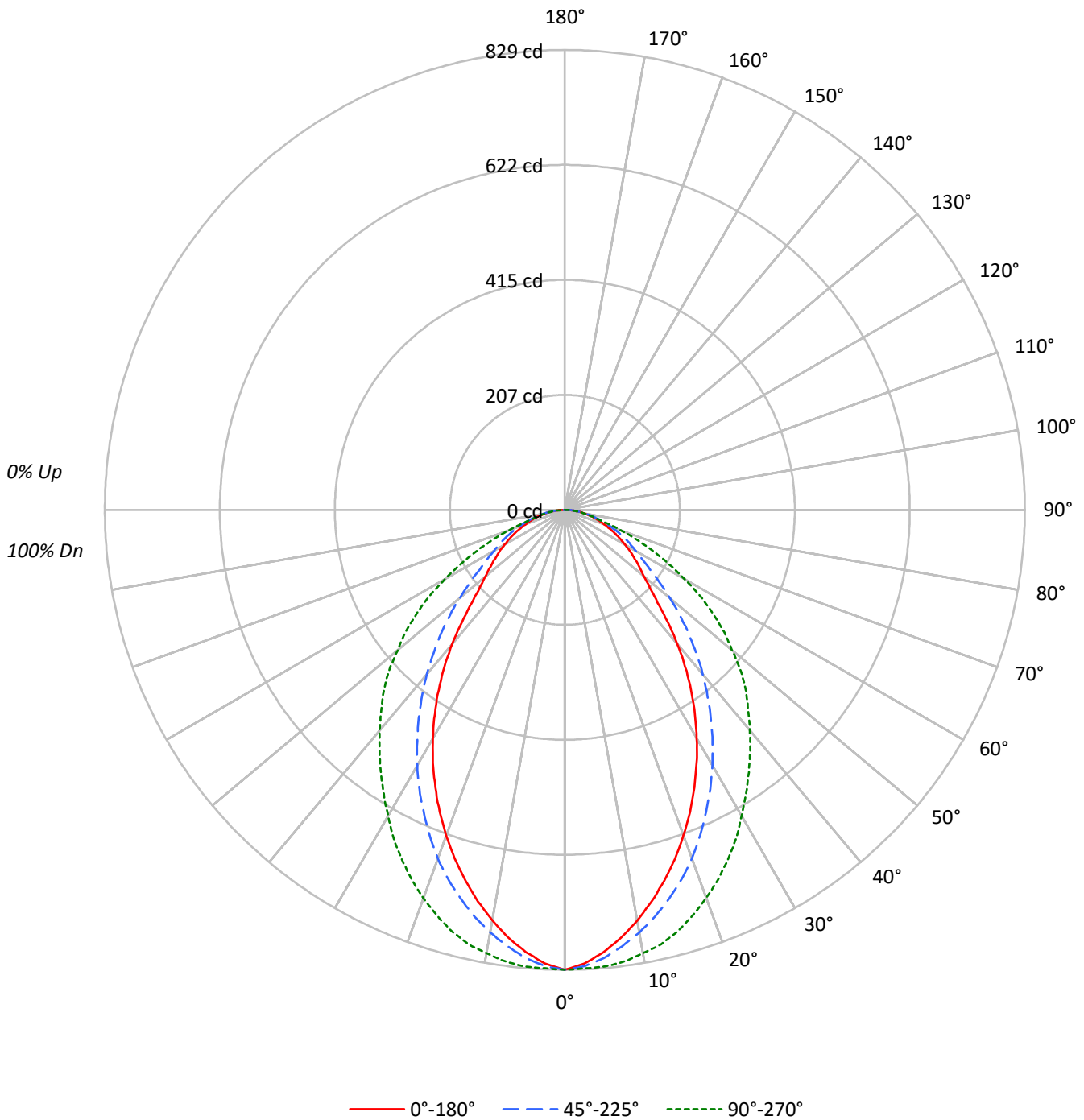
Lumens per Lamp: N/A
Luminaire Lumens: 1509.3 lumens
Efficiency: N/A
Efficacy: 64.2 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
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

TEST NUMBER: P1061027

CATALOG NUMBER: S124RDR-H795D950-X4F0-XX-UDD-WVL-S

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	102	94	88	83	99	92	87	82	89	84	80		86	82	79		83	80	77	75
3	94	84	77	71	91	83	76	71	80	74	69		77	72	68		75	71	67	65
4	87	76	68	62	84	74	67	61	72	66	61		70	64	60		68	63	59	57
5	80	69	60	54	78	68	60	54	65	59	54		64	58	53		62	57	52	50
6	75	62	54	48	73	62	54	48	60	53	48		58	52	47		57	51	47	45
7	70	57	49	43	68	56	49	43	55	48	43		54	47	43		52	47	42	41
8	65	53	45	39	64	52	44	39	51	44	39		50	43	39		48	43	39	37
9	61	49	41	36	60	48	41	36	47	40	36		46	40	35		45	39	35	34
10	58	45	38	33	56	45	38	33	44	37	33		43	37	33		42	36	32	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7139	7139	7139
5°	6919	7009	7143
10°	6573	6763	7097
15°	6166	6469	7012
20°	5726	6131	6825
25°	5243	5714	6605
30°	4727	5288	6334
35°	4166	4823	6075
40°	3547	4347	5832
45°	2879	3842	5620
50°	2492	3306	5262
55°	2309	2804	4879
60°	2155	2530	4280
65°	2019	2372	3560
70°	1881	2188	2691
75°	1793	2023	1936
80°	1681	1855	1636
85°	1541	1719	1284

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5620 cd/sqm



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CATALOG NUMBER: S124RDR-H795D950-X4F0-XX-UDD-WVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.6	5.1
10°-20°	205.7	13.6
20°-30°	280.9	18.6
30°-40°	294.3	19.5
40°-50°	254.8	16.9
50°-60°	191.4	12.7
60°-70°	123.4	8.2
70°-80°	63.3	4.2
80°-90°	18.9	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°	563.2	37.3
0°-40°	857.5	56.8
0°-60°	1303.7	86.4
0°-90°	1509.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1509.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	829	829	829	829	829	
5°	800	812	811	817	826	75
15°	692	709	726	759	786	194
25°	552	573	601	648	695	253
35°	396	419	459	520	578	247
45°	236	261	316	393	462	186
55°	154	159	187	267	325	138
65°	99	101	116	141	175	98
75°	54	60	61	60	58	57
85°	16	18	17	16	13	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	829.0	829.0	829.0	829.0	829.0
2.5°	818.6	829.0	823.0	824.7	827.3
5°	800.4	812.5	810.8	816.9	826.4
7.5°	777.8	790.8	793.4	807.3	821.2
10°	751.7	766.5	773.4	794.3	811.7
12.5°	723.0	738.7	750.8	776.9	802.1
15°	691.7	709.1	725.6	758.7	786.5
17.5°	659.6	677.0	698.7	735.2	766.5
20°	624.8	643.9	669.1	707.4	744.8
22.5°	589.2	609.2	636.1	677.8	721.3
25°	551.8	572.7	601.4	648.3	695.2
27.5°	514.5	535.3	567.5	617.0	668.3
30°	475.4	497.1	531.8	585.7	637.0
32.5°	436.2	459.7	495.3	552.7	607.4
35°	396.3	418.9	458.8	519.7	577.9
37.5°	356.3	379.8	422.3	487.5	548.4
40°	315.5	339.8	386.7	455.4	518.8
42.5°	274.6	300.7	350.2	422.3	489.3
45°	236.4	260.7	315.5	392.8	461.5
47.5°	207.7	224.2	280.7	364.1	430.2
50°	186.0	194.7	246.8	332.8	392.8
52.5°	169.5	175.5	215.5	298.9	362.4
55°	153.8	159.0	186.8	266.8	325.0
57.5°	139.9	142.5	165.1	235.5	289.4
60°	125.1	127.7	146.9	201.6	248.5
62.5°	112.1	113.8	132.1	169.5	211.2
65°	99.1	100.8	116.4	140.8	174.7
67.5°	86.9	89.5	101.7	114.7	139.0
70°	74.7	80.0	86.9	93.0	106.9
72.5°	64.3	69.5	73.0	74.7	75.6
75°	53.9	60.0	60.8	60.0	58.2
77.5°	43.5	48.7	48.7	46.9	45.2
80°	33.9	38.2	37.4	35.6	33.0
82.5°	25.2	27.8	26.9	25.2	22.6
85°	15.6	18.2	17.4	16.5	13.0
87.5°	7.8	10.4	9.6	8.7	5.2
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	13.26	14.74	13.63	15.06	15.37	17.04	18.52	17.40	18.83	19.15
	3H	14.92	16.25	15.29	16.57	16.94	18.15	19.48	18.53	19.81	20.17
	4H	15.59	16.83	15.99	17.18	17.56	18.44	19.68	18.84	20.03	20.41
	6H	16.10	17.25	16.51	17.62	18.01	18.64	19.79	19.05	20.15	20.55
	8H	16.28	17.38	16.71	17.77	18.17	18.69	19.78	19.12	20.17	20.57
	12H	16.41	17.45	16.84	17.84	18.27	18.72	19.76	19.15	20.14	20.57
4H	2H	14.04	15.29	14.44	15.64	16.02	17.19	18.44	17.59	18.79	19.17
	3H	15.91	16.94	16.32	17.34	17.74	18.51	19.54	18.92	19.94	20.34
	4H	16.72	17.64	17.15	18.06	18.50	18.91	19.84	19.35	20.26	20.70
	6H	17.36	18.17	17.82	18.61	19.07	19.23	20.04	19.69	20.48	20.94
	8H	17.59	18.35	18.06	18.79	19.26	19.32	20.08	19.79	20.52	20.99
	12H	17.76	18.43	18.24	18.91	19.38	19.38	20.06	19.87	20.54	21.01
8H	4H	17.06	17.82	17.53	18.26	18.73	19.05	19.80	19.51	20.25	20.71
	6H	17.86	18.48	18.36	18.97	19.45	19.46	20.08	19.96	20.57	21.05
	8H	18.18	18.74	18.69	19.25	19.74	19.61	20.17	20.12	20.68	21.17
	12H	18.44	18.94	18.95	19.43	19.99	19.73	20.23	20.24	20.72	21.29
12H	4H	17.09	17.77	17.58	18.25	18.72	19.05	19.72	19.53	20.20	20.67
	6H	17.92	18.48	18.43	18.99	19.48	19.48	20.04	20.00	20.55	21.04
	8H	18.31	18.80	18.82	19.29	19.86	19.68	20.18	20.19	20.67	21.23