

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: P1060542

Luminaire Tested: S124RDRP-S575D950-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060542
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-S575D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

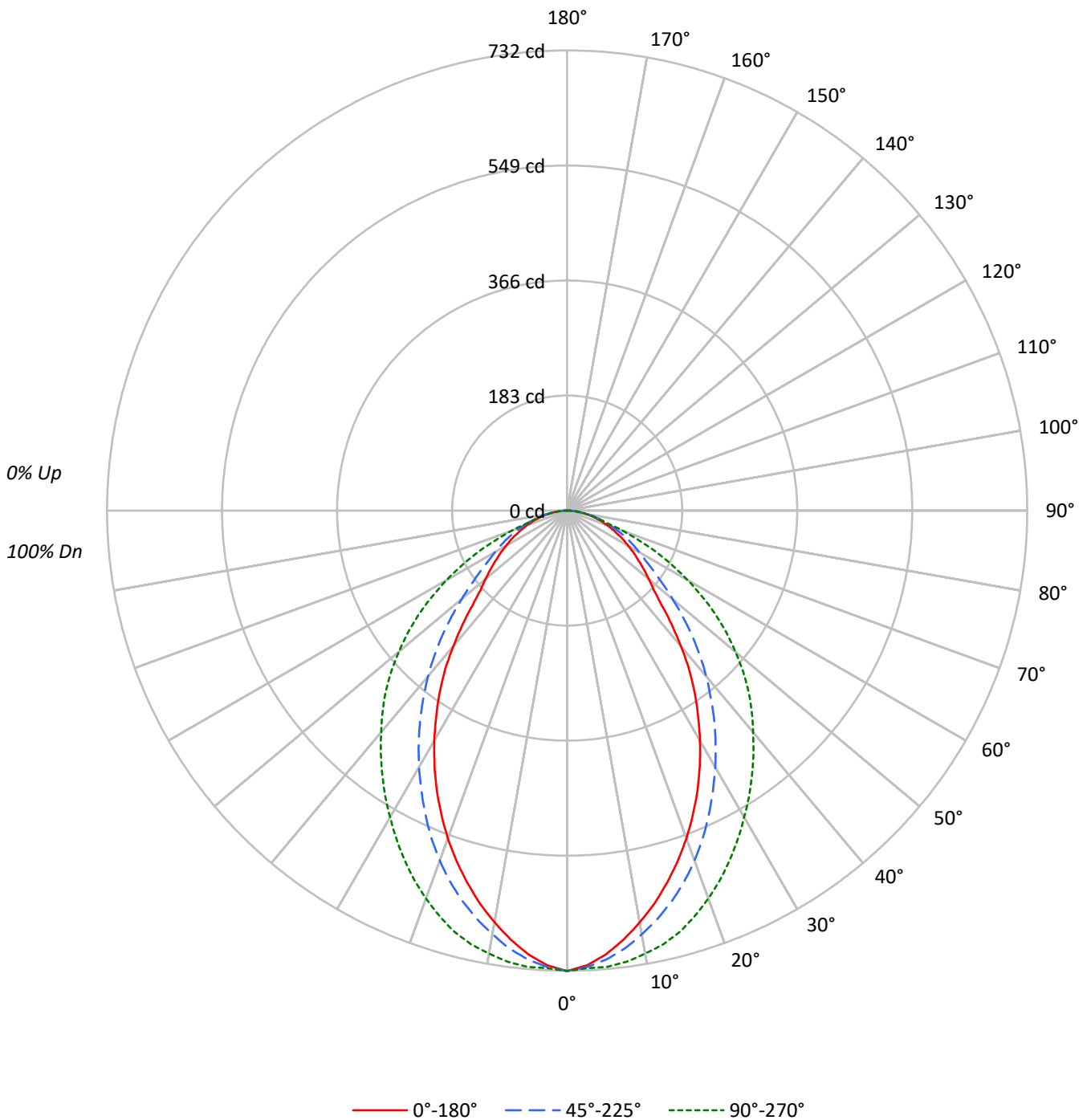
Lumens per Lamp: N/A
Luminaire Lumens: 1343.9 lumens
Efficiency: N/A
Efficacy: 68.6 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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	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°	6307	6307	6307
5°	6123	6196	6297
10°	5815	5984	6256
15°	5466	5732	6182
20°	5084	5429	6017
25°	4661	5068	5820
30°	4202	4685	5600
35°	3720	4286	5390
40°	3162	3869	5173
45°	2589	3417	4972
50°	2267	2935	4679
55°	2082	2530	4330
60°	1931	2277	3818
65°	1809	2139	3195
70°	1697	1959	2399
75°	1597	1790	1747
80°	1478	1641	1478
85°	1344	1601	1284

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4972 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.7	5.0
10°-20°	182.1	13.6
20°-30°	248.9	18.5
30°-40°	261.6	19.5
40°-50°	227.0	16.9
50°-60°	171.3	12.7
60°-70°	111.0	8.3
70°-80°	57.0	4.2
80°-90°	17.3	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°	498.7	37.1
0°-40°	760.4	56.6
0°-60°	1158.6	86.2
0°-90°	1343.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1343.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	732	732	732	732	732	
5°	708	718	717	723	728	66
15°	613	628	643	672	694	172
25°	491	508	533	574	612	225
35°	354	373	408	462	513	220
45°	213	233	281	351	408	167
55°	139	143	168	239	288	125
65°	89	91	105	127	157	88
75°	48	54	54	54	52	51
85°	14	17	16	16	13	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	732.4	732.4	732.4	732.4	732.4
2.5°	724.0	733.0	726.6	727.9	728.5
5°	708.4	718.1	716.8	722.7	728.5
7.5°	688.3	700.0	702.6	714.2	724.0
10°	665.0	678.0	684.4	703.2	715.5
12.5°	640.4	653.3	665.0	689.0	706.5
15°	613.1	628.0	643.0	672.1	693.5
17.5°	584.6	600.2	619.0	650.7	676.0
20°	554.8	570.4	592.4	626.7	656.6
22.5°	523.0	540.5	563.9	600.8	635.8
25°	490.6	508.1	533.4	574.3	612.5
27.5°	456.9	475.1	502.3	547.7	588.5
30°	422.6	442.0	471.2	519.2	563.2
32.5°	387.6	408.3	439.4	490.6	538.6
35°	353.9	373.3	407.7	462.1	512.7
37.5°	318.9	338.3	375.3	434.3	486.8
40°	281.3	302.7	344.2	405.1	460.2
42.5°	246.3	267.7	312.4	377.2	434.9
45°	212.6	232.7	280.6	350.6	408.3
47.5°	186.7	200.9	248.9	324.7	379.8
50°	169.2	175.6	219.1	296.2	349.3
52.5°	153.6	158.8	191.8	267.7	319.5
55°	138.7	142.6	168.5	239.2	288.4
57.5°	125.7	127.7	147.8	210.6	254.7
60°	112.1	114.7	132.2	181.5	221.7
62.5°	101.1	102.4	118.6	153.6	188.6
65°	88.8	90.7	105.0	127.0	156.8
67.5°	77.8	81.0	90.7	103.7	123.8
70°	67.4	71.9	77.8	84.3	95.3
72.5°	57.7	62.9	66.1	68.7	66.8
75°	48.0	53.8	53.8	54.4	52.5
77.5°	38.9	44.1	43.4	42.8	40.2
80°	29.8	34.4	33.1	32.4	29.8
82.5°	22.0	25.3	24.0	23.3	20.1
85°	13.6	16.9	16.2	15.6	13.0
87.5°	6.5	9.7	9.1	8.4	5.8
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	12.90	14.39	13.27	14.70	15.02	16.64	18.12	17.00	18.44	18.75
	3H	14.57	15.90	14.95	16.23	16.59	17.77	19.10	18.14	19.43	19.79
	4H	15.24	16.48	15.64	16.83	17.21	18.06	19.31	18.46	19.66	20.04
	6H	15.74	16.90	16.16	17.26	17.66	18.26	19.41	18.67	19.78	20.17
	8H	15.92	17.02	16.35	17.41	17.81	18.32	19.41	18.74	19.80	20.20
	12H	16.04	17.09	16.47	17.47	17.90	18.35	19.40	18.78	19.78	20.21
4H	2H	13.69	14.94	14.09	15.29	15.67	16.80	18.05	17.20	18.40	18.78
	3H	15.56	16.60	15.98	17.00	17.40	18.14	19.17	18.55	19.57	19.97
	4H	16.37	17.30	16.80	17.72	18.16	18.55	19.48	18.98	19.90	20.34
	6H	17.01	17.82	17.47	18.27	18.73	18.87	19.68	19.33	20.13	20.59
	8H	17.24	17.99	17.70	18.44	18.91	18.97	19.72	19.43	20.17	20.64
	12H	17.40	18.08	17.88	18.56	19.03	19.04	19.72	19.52	20.19	20.67
8H	4H	16.72	17.47	17.18	17.92	18.39	18.68	19.44	19.15	19.89	20.35
	6H	17.51	18.13	18.01	18.63	19.10	19.10	19.73	19.60	20.22	20.70
	8H	17.83	18.39	18.34	18.90	19.39	19.26	19.82	19.78	20.33	20.82
	12H	18.09	18.59	18.60	19.08	19.65	19.40	19.90	19.91	20.39	20.96
12H	4H	16.75	17.42	17.23	17.90	18.37	18.69	19.37	19.17	19.84	20.32
	6H	17.57	18.13	18.08	18.64	19.13	19.13	19.69	19.64	20.20	20.69
	8H	17.96	18.45	18.47	18.94	19.51	19.33	19.83	19.85	20.32	20.89