

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: P1060506

Luminaire Tested: S124RDRP-S575D927-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060506
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-S575D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

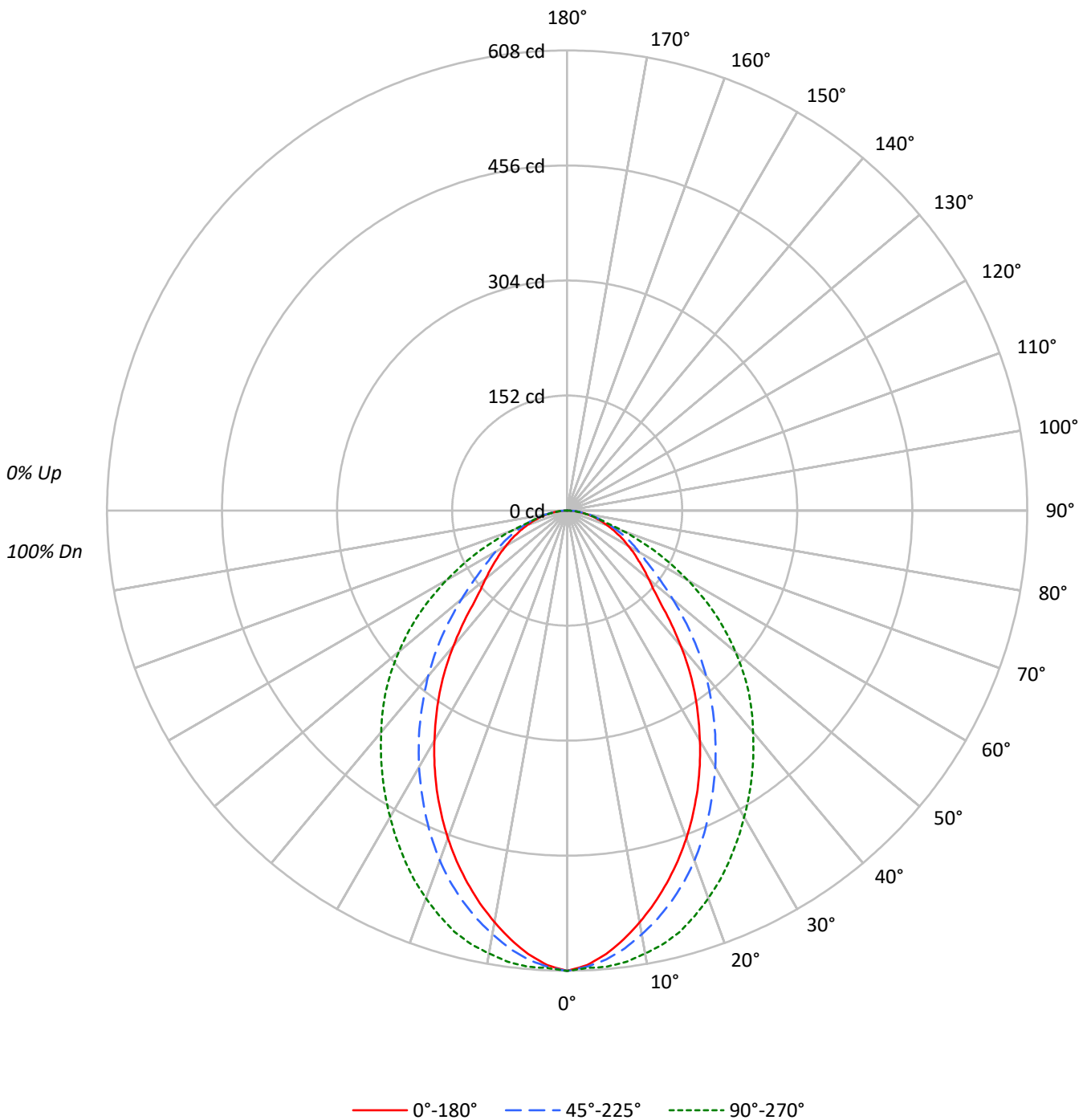
Lumens per Lamp: N/A
Luminaire Lumens: 1115.9 lumens
Efficiency: N/A
Efficacy: 56.9 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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°	5237	5237	5237
5°	5085	5145	5229
10°	4828	4969	5196
15°	4539	4760	5134
20°	4222	4508	4996
25°	3871	4208	4832
30°	3489	3891	4650
35°	3090	3558	4475
40°	2626	3213	4295
45°	2149	2837	4130
50°	1882	2437	3886
55°	1730	2100	3596
60°	1603	1891	3171
65°	1502	1777	2653
70°	1410	1626	1992
75°	1324	1487	1451
80°	1230	1359	1230
85°	1116	1334	1067

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4130 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.2	5.0
10°-20°	151.2	13.6
20°-30°	206.7	18.5
30°-40°	217.2	19.5
40°-50°	188.5	16.9
50°-60°	142.2	12.7
60°-70°	92.2	8.3
70°-80°	47.3	4.2
80°-90°	14.3	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°	414.1	37.1
0°-40°	631.4	56.6
0°-60°	962.1	86.2
0°-90°	1115.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1115.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	608	608	608	608	608	
5°	588	596	595	600	605	55
15°	509	522	534	558	576	143
25°	407	422	443	477	509	187
35°	294	310	338	384	426	183
45°	176	193	233	291	339	139
55°	115	118	140	199	240	104
65°	74	75	87	106	130	73
75°	40	45	45	45	44	42
85°	11	14	14	13	11	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	608.2	608.2	608.2	608.2	608.2
2.5°	601.2	608.7	603.3	604.4	604.9
5°	588.3	596.3	595.2	600.1	604.9
7.5°	571.6	581.3	583.4	593.1	601.2
10°	552.2	563.0	568.3	583.9	594.2
12.5°	531.7	542.5	552.2	572.1	586.6
15°	509.1	521.5	533.9	558.1	575.9
17.5°	485.5	498.4	514.0	540.4	561.3
20°	460.7	473.6	491.9	520.4	545.2
22.5°	434.3	448.9	468.2	498.9	528.0
25°	407.4	421.9	442.9	476.8	508.6
27.5°	379.4	394.5	417.1	454.8	488.7
30°	350.9	367.1	391.3	431.1	467.7
32.5°	321.8	339.1	364.9	407.4	447.2
35°	293.9	310.0	338.5	383.7	425.7
37.5°	264.8	280.9	311.6	360.6	404.2
40°	233.6	251.3	285.8	336.4	382.1
42.5°	204.5	222.3	259.4	313.2	361.1
45°	176.5	193.2	233.0	291.2	339.1
47.5°	155.0	166.8	206.7	269.6	315.4
50°	140.5	145.9	181.9	246.0	290.1
52.5°	127.6	131.9	159.3	222.3	265.3
55°	115.2	118.4	139.9	198.6	239.5
57.5°	104.4	106.0	122.7	174.9	211.5
60°	93.1	95.3	109.8	150.7	184.1
62.5°	84.0	85.0	98.5	127.6	156.6
65°	73.7	75.3	87.2	105.5	130.2
67.5°	64.6	67.3	75.3	86.1	102.8
70°	56.0	59.7	64.6	70.0	79.1
72.5°	47.9	52.2	54.9	57.0	55.4
75°	39.8	44.7	44.7	45.2	43.6
77.5°	32.3	36.6	36.1	35.5	33.4
80°	24.8	28.5	27.4	26.9	24.8
82.5°	18.3	21.0	19.9	19.4	16.7
85°	11.3	14.0	13.5	12.9	10.8
87.5°	5.4	8.1	7.5	7.0	4.8
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	12.25	13.74	12.62	14.05	14.37	15.99	17.48	16.36	17.79	18.11
	3H	13.92	15.26	14.30	15.58	15.95	17.12	18.45	17.50	18.78	19.14
	4H	14.59	15.84	14.99	16.19	16.57	17.42	18.66	17.82	19.01	19.39
	6H	15.10	16.25	15.51	16.62	17.01	17.62	18.77	18.03	19.14	19.53
	8H	15.27	16.37	15.70	16.76	17.16	17.67	18.77	18.10	19.16	19.56
	12H	15.39	16.44	15.82	16.82	17.25	17.70	18.75	18.13	19.14	19.57
4H	2H	13.05	14.30	13.45	14.64	15.02	16.16	17.41	16.56	17.76	18.14
	3H	14.92	15.95	15.33	16.35	16.76	17.49	18.53	17.90	18.93	19.33
	4H	15.72	16.66	16.16	17.07	17.51	17.91	18.84	18.34	19.25	19.69
	6H	16.37	17.18	16.83	17.62	18.08	18.23	19.04	18.69	19.48	19.94
	8H	16.59	17.35	17.05	17.79	18.26	18.32	19.08	18.79	19.52	19.99
	12H	16.76	17.43	17.24	17.91	18.38	18.39	19.07	18.88	19.55	20.02
8H	4H	16.07	16.83	16.54	17.27	17.74	18.04	18.80	18.50	19.24	19.71
	6H	16.86	17.49	17.36	17.98	18.46	18.46	19.08	18.96	19.58	20.05
	8H	17.18	17.74	17.70	18.25	18.74	18.62	19.18	19.13	19.69	20.18
	12H	17.44	17.94	17.95	18.43	19.00	18.76	19.25	19.27	19.74	20.31
12H	4H	16.10	16.78	16.58	17.26	17.73	18.04	18.72	18.53	19.20	19.67
	6H	16.92	17.48	17.44	18.00	18.48	18.48	19.04	18.99	19.55	20.04
	8H	17.31	17.80	17.82	18.30	18.86	18.69	19.19	19.20	19.68	20.24