

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: P1060533

Luminaire Tested: S124RDRP-S575D940-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060533
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-S575D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

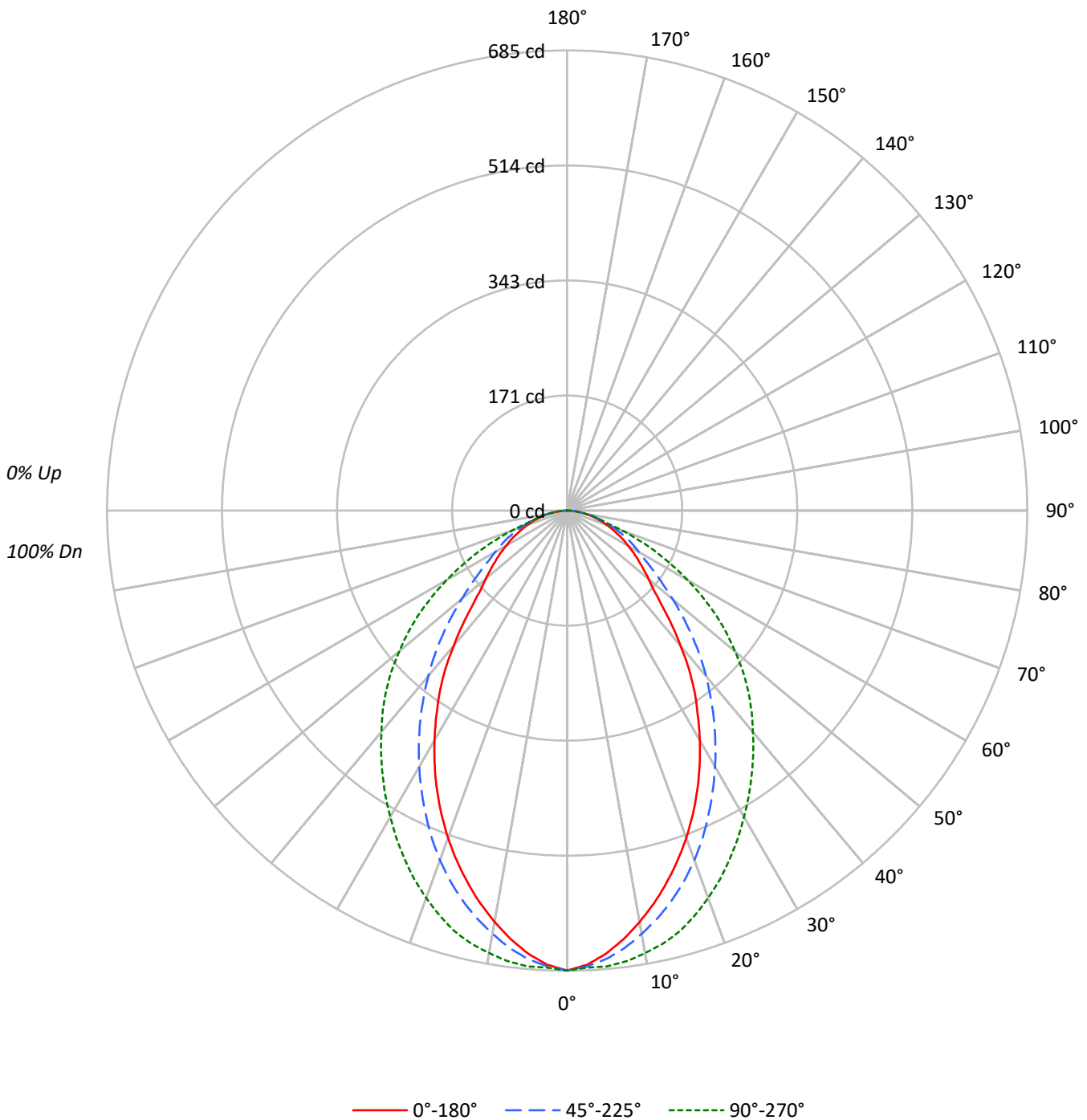
Lumens per Lamp: N/A
Luminaire Lumens: 1256.1 lumens
Efficiency: N/A
Efficacy: 64.1 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	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					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°	5895	5895	5895
5°	5724	5791	5886
10°	5435	5594	5848
15°	5109	5358	5779
20°	4752	5074	5624
25°	4357	4737	5440
30°	3928	4379	5235
35°	3477	4006	5037
40°	2955	3616	4835
45°	2420	3194	4648
50°	2118	2744	4374
55°	1946	2365	4048
60°	1805	2129	3568
65°	1691	1999	2987
70°	1586	1830	2243
75°	1491	1674	1634
80°	1384	1532	1384
85°	1255	1492	1196

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4648 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.3	5.0
10°-20°	170.2	13.6
20°-30°	232.7	18.5
30°-40°	244.5	19.5
40°-50°	212.2	16.9
50°-60°	160.1	12.7
60°-70°	103.8	8.3
70°-80°	53.3	4.2
80°-90°	16.1	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°	466.2	37.1
0°-40°	710.7	56.6
0°-60°	1083.0	86.2
0°-90°	1256.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1256.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	685	685	685	685	685	
5°	662	671	670	676	681	62
15°	573	587	601	628	648	161
25°	459	475	499	537	572	210
35°	331	349	381	432	479	206
45°	199	218	262	328	382	156
55°	130	133	158	224	270	117
65°	83	85	98	119	147	83
75°	45	50	50	51	49	48
85°	13	16	15	14	12	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	684.6	684.6	684.6	684.6	684.6
2.5°	676.7	685.2	679.1	680.3	680.9
5°	662.2	671.2	670.0	675.5	680.9
7.5°	643.4	654.3	656.7	667.6	676.7
10°	621.6	633.7	639.7	657.3	668.8
12.5°	598.5	610.7	621.6	644.0	660.3
15°	573.1	587.0	601.0	628.2	648.2
17.5°	546.4	561.0	578.6	608.2	631.9
20°	518.6	533.1	553.7	585.8	613.7
22.5°	488.9	505.3	527.1	561.6	594.3
25°	458.6	475.0	498.6	536.8	572.5
27.5°	427.1	444.1	469.5	511.9	550.1
30°	395.0	413.2	440.4	485.3	526.5
32.5°	362.3	381.7	410.7	458.6	503.4
35°	330.8	349.0	381.1	431.9	479.2
37.5°	298.1	316.2	350.8	405.9	455.0
40°	262.9	282.9	321.7	378.6	430.1
42.5°	230.2	250.2	292.0	352.6	406.5
45°	198.7	217.5	262.3	327.7	381.7
47.5°	174.5	187.8	232.6	303.5	355.0
50°	158.1	164.2	204.8	276.9	326.5
52.5°	143.6	148.4	179.3	250.2	298.7
55°	129.6	133.3	157.5	223.5	269.6
57.5°	117.5	119.3	138.1	196.9	238.1
60°	104.8	107.2	123.6	169.6	207.2
62.5°	94.5	95.7	110.9	143.6	176.3
65°	83.0	84.8	98.1	118.7	146.6
67.5°	72.7	75.7	84.8	96.9	115.7
70°	63.0	67.2	72.7	78.8	89.1
72.5°	53.9	58.8	61.8	64.2	62.4
75°	44.8	50.3	50.3	50.9	49.1
77.5°	36.3	41.2	40.6	40.0	37.6
80°	27.9	32.1	30.9	30.3	27.9
82.5°	20.6	23.6	22.4	21.8	18.8
85°	12.7	15.8	15.1	14.5	12.1
87.5°	6.1	9.1	8.5	7.9	5.5
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	12.66	14.15	13.03	14.46	14.78	16.41	17.89	16.77	18.21	18.52
	3H	14.33	15.66	14.71	15.99	16.35	17.53	18.86	17.91	19.19	19.55
	4H	15.00	16.25	15.40	16.60	16.98	17.83	19.08	18.23	19.43	19.80
	6H	15.51	16.66	15.92	17.03	17.42	18.03	19.18	18.44	19.55	19.94
	8H	15.68	16.78	16.11	17.17	17.57	18.08	19.18	18.51	19.57	19.97
	12H	15.80	16.85	16.23	17.23	17.66	18.12	19.17	18.55	19.55	19.98
4H	2H	13.46	14.71	13.86	15.05	15.43	16.57	17.82	16.97	18.17	18.55
	3H	15.33	16.36	15.74	16.76	17.17	17.90	18.94	18.31	19.34	19.74
	4H	16.13	17.07	16.57	17.48	17.92	18.32	19.25	18.75	19.67	20.11
	6H	16.78	17.59	17.23	18.03	18.49	18.64	19.45	19.10	19.89	20.35
	8H	17.00	17.76	17.46	18.20	18.67	18.73	19.49	19.20	19.94	20.40
	12H	17.16	17.84	17.65	18.32	18.79	18.81	19.48	19.29	19.96	20.43
8H	4H	16.48	17.24	16.95	17.68	18.15	18.45	19.21	18.92	19.65	20.12
	6H	17.27	17.90	17.77	18.39	18.87	18.87	19.50	19.37	19.99	20.47
	8H	17.59	18.15	18.10	18.66	19.15	19.03	19.59	19.54	20.10	20.59
	12H	17.85	18.35	18.36	18.84	19.41	19.17	19.66	19.68	20.16	20.72
12H	4H	16.51	17.19	16.99	17.67	18.14	18.46	19.13	18.94	19.61	20.08
	6H	17.33	17.89	17.85	18.41	18.89	18.89	19.45	19.41	19.96	20.45
	8H	17.72	18.21	18.23	18.71	19.27	19.10	19.60	19.61	20.09	20.66