

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: P1060522

Luminaire Tested: S124RDRP-S575D935-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060522
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-37)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S575D935-X4F0-XX-UDD-WVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

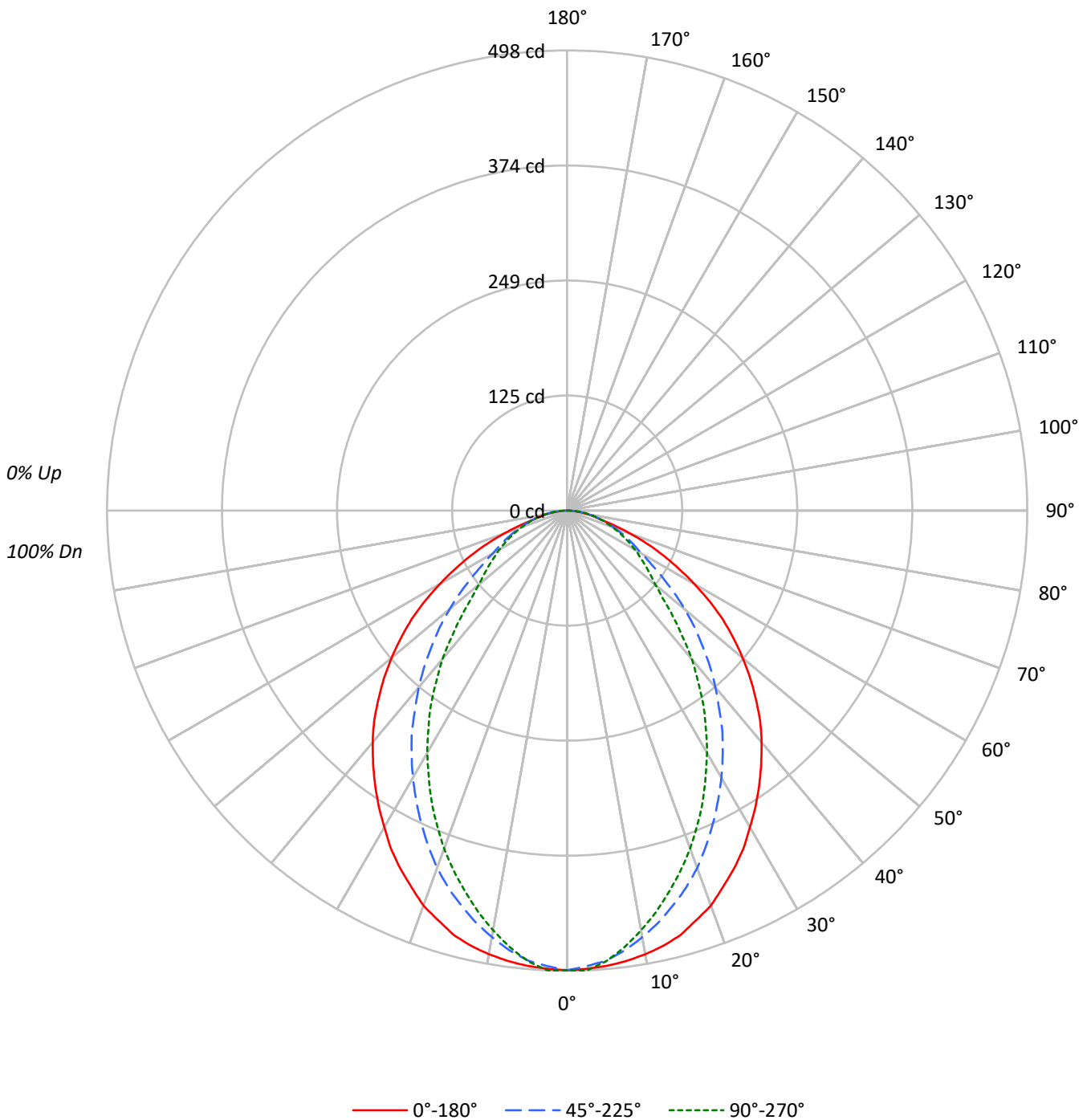
Lumens per Lamp: N/A
Luminaire Lumens: 959.2 lumens
Efficiency: N/A
Efficacy: 48.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.96 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	107	104	100	97	99	97	94	96	93	91	92	90	88	86					86			
2	101	94	88	83	99	92	86	82	89	84	80	85	82	78	82	79	76	74					74			
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64					64			
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56					56			
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50					50			
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44					44			
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40					40			
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36					36			
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33					33			
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30					30			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4284	4284	4284
5°	4274	4224	4230
10°	4263	4099	4033
15°	4236	3945	3804
20°	4168	3771	3567
25°	4060	3549	3299
30°	3935	3319	3011
35°	3810	3079	2704
40°	3680	2806	2359
45°	3517	2520	1972
50°	3321	2224	1668
55°	3090	1887	1545
60°	2738	1600	1460
65°	2335	1477	1381
70°	1825	1370	1309
75°	1244	1264	1264
80°	1071	1190	1220
85°	929	1156	1275

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3517 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.3	4.8
10°-20°	125.7	13.1
20°-30°	174.5	18.2
30°-40°	187.1	19.5
40°-50°	165.7	17.3
50°-60°	124.9	13.0
60°-70°	80.9	8.4
70°-80°	41.5	4.3
80°-90°	12.7	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°	346.5	36.1
0°-40°	533.5	55.6
0°-60°	824.1	85.9
0°-90°	959.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	959.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	498	498	498	498	498	
5°	494	495	489	489	489	47
15°	475	465	442	431	427	134
25°	427	404	374	354	347	197
35°	362	330	293	267	257	227
45°	289	251	207	175	162	223
55°	206	171	126	106	103	183
65°	115	92	72	68	68	114
75°	37	39	38	38	38	44
85°	9	10	12	13	13	11
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	497.5	497.5	497.5	497.5	497.5
2.5°	496.3	498.0	493.4	496.9	498.0
5°	494.5	495.1	488.7	489.3	489.3
7.5°	491.6	490.4	479.9	477.0	476.4
10°	487.5	484.0	468.8	463.0	461.2
12.5°	482.3	475.8	456.5	448.4	444.8
15°	475.2	464.7	442.5	431.4	426.7
17.5°	464.7	451.3	427.9	413.9	408.6
20°	454.8	436.7	411.5	394.0	389.3
22.5°	440.8	421.5	392.8	374.1	368.3
25°	427.3	404.5	373.5	353.7	347.2
27.5°	412.7	387.0	353.7	332.6	324.4
30°	395.7	368.3	333.8	311.6	302.8
32.5°	379.4	350.1	313.3	288.8	279.4
35°	362.4	329.7	292.9	266.6	257.2
37.5°	344.9	310.4	270.1	244.3	232.1
40°	327.4	291.1	249.6	220.4	209.9
42.5°	309.2	271.2	228.6	198.2	184.7
45°	288.8	251.4	206.9	174.8	161.9
47.5°	268.9	232.1	187.1	152.0	140.3
50°	247.9	211.6	166.0	132.1	124.5
52.5°	226.8	190.6	145.6	116.9	113.4
55°	205.8	171.3	125.7	105.8	102.9
57.5°	182.4	151.4	108.1	95.9	93.5
60°	159.0	129.8	92.9	86.5	84.8
62.5°	136.2	111.1	82.4	77.2	76.0
65°	114.6	92.4	72.5	68.4	67.8
67.5°	93.5	76.0	63.1	60.8	59.6
70°	72.5	60.8	54.4	53.2	52.0
72.5°	53.8	49.1	46.2	45.6	45.0
75°	37.4	39.2	38.0	38.0	38.0
77.5°	29.8	30.4	31.0	31.6	31.0
80°	21.6	23.4	24.0	25.1	24.6
82.5°	15.2	16.4	18.1	18.7	19.3
85°	9.4	9.9	11.7	12.9	12.9
87.5°	4.1	4.7	5.8	7.0	7.6
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	15.49	16.99	15.86	17.31	17.62	12.06	13.56	12.42	13.87	14.19
	3H	16.70	18.04	17.08	18.37	18.73	13.75	15.10	14.13	15.43	15.79
	4H	17.01	18.26	17.41	18.61	18.99	14.43	15.69	14.83	16.04	16.42
	6H	17.21	18.37	17.62	18.74	19.13	14.98	16.14	15.39	16.51	16.90
	8H	17.27	18.37	17.69	18.76	19.16	15.20	16.31	15.63	16.70	17.10
	12H	17.30	18.36	17.73	18.74	19.17	15.37	16.43	15.80	16.81	17.24
4H	2H	15.64	16.89	16.04	17.24	17.62	12.72	13.98	13.12	14.33	14.71
	3H	17.04	18.08	17.45	18.48	18.88	14.63	15.67	15.04	16.07	16.48
	4H	17.46	18.40	17.90	18.82	19.26	15.43	16.37	15.86	16.79	17.23
	6H	17.79	18.61	18.25	19.05	19.51	16.12	16.94	16.58	17.38	17.84
	8H	17.89	18.65	18.35	19.10	19.56	16.39	17.16	16.86	17.60	18.07
	12H	17.96	18.64	18.44	19.12	19.59	16.62	17.31	17.11	17.79	18.26
8H	4H	17.59	18.36	18.06	18.80	19.27	15.75	16.51	16.21	16.96	17.42
	6H	18.01	18.64	18.51	19.14	19.61	16.58	17.21	17.07	17.70	18.18
	8H	18.17	18.74	18.68	19.25	19.74	16.94	17.51	17.46	18.02	18.51
	12H	18.30	18.80	18.81	19.29	19.86	17.28	17.78	17.79	18.27	18.84
12H	4H	17.60	18.28	18.08	18.76	19.23	15.78	16.46	16.26	16.94	17.41
	6H	18.04	18.61	18.55	19.12	19.60	16.64	17.20	17.15	17.71	18.20
	8H	18.25	18.75	18.76	19.24	19.81	17.07	17.57	17.58	18.06	18.63