

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: P1060504

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060504
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-S575D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

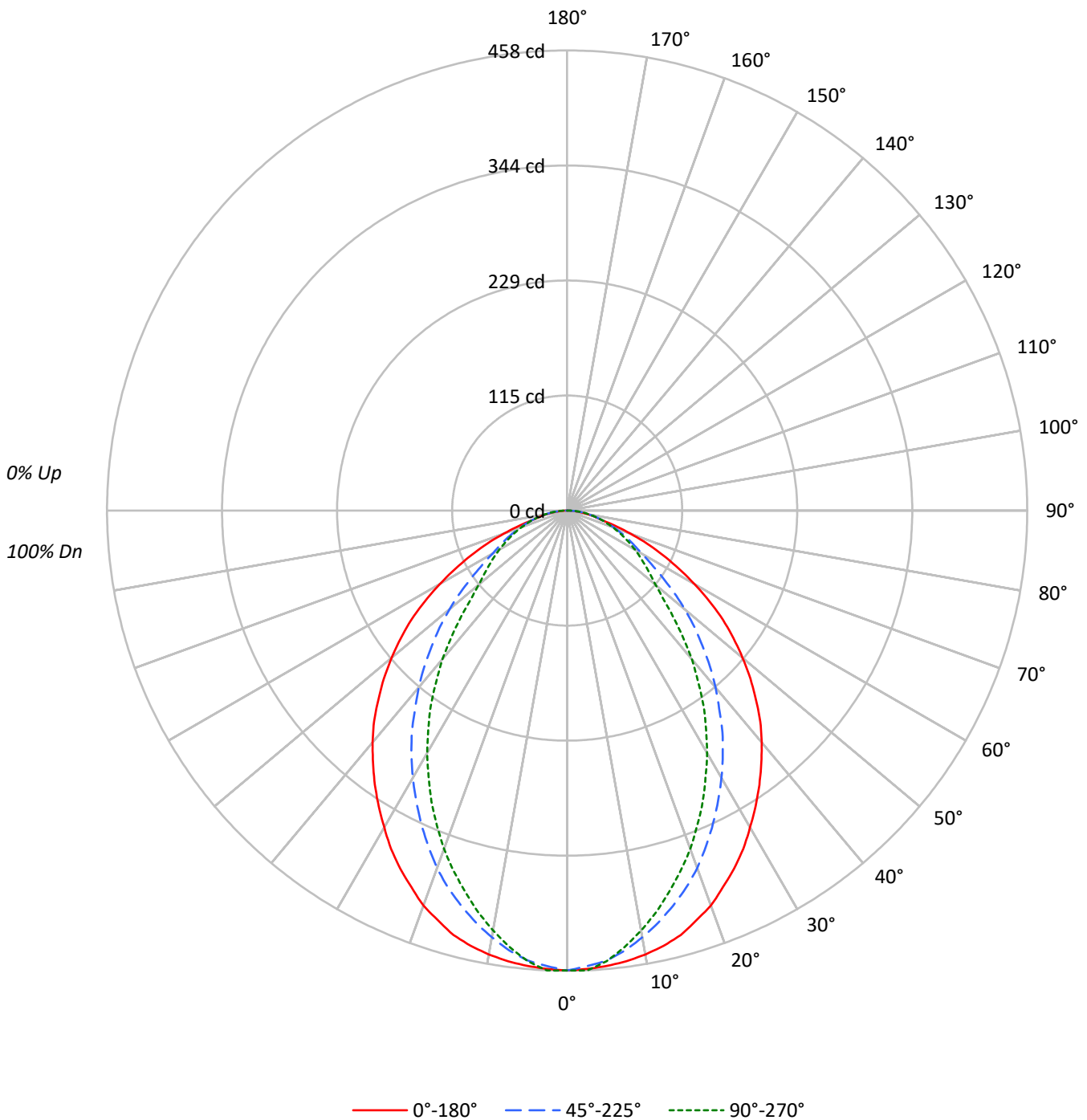
Lumens per Lamp: N/A
Luminaire Lumens: 882.5 lumens
Efficiency: N/A
Efficacy: 45.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.96 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	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°	3941	3941	3941
5°	3933	3886	3892
10°	3923	3771	3710
15°	3898	3629	3500
20°	3834	3469	3282
25°	3736	3266	3036
30°	3620	3054	2770
35°	3506	2833	2487
40°	3386	2582	2171
45°	3236	2319	1815
50°	3054	2046	1535
55°	2842	1736	1422
60°	2520	1473	1343
65°	2148	1359	1271
70°	1679	1259	1206
75°	1145	1164	1164
80°	987	1096	1121
85°	850	1067	1166

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3236 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.6	4.8
10°-20°	115.6	13.1
20°-30°	160.6	18.2
30°-40°	172.1	19.5
40°-50°	152.5	17.3
50°-60°	114.9	13.0
60°-70°	74.4	8.4
70°-80°	38.2	4.3
80°-90°	11.7	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°	318.8	36.1
0°-40°	490.9	55.6
0°-60°	758.2	85.9
0°-90°	882.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	882.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	458	458	458	458	458	
5°	455	456	450	450	450	43
15°	437	428	407	397	393	123
25°	393	372	344	325	320	181
35°	334	303	270	245	237	209
45°	266	231	190	161	149	205
55°	189	158	116	97	95	168
65°	105	85	67	63	62	105
75°	34	36	35	35	35	41
85°	9	9	11	12	12	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	457.7	457.7	457.7	457.7	457.7
2.5°	456.6	458.2	453.9	457.2	458.2
5°	455.0	455.5	449.6	450.2	450.2
7.5°	452.3	451.2	441.6	438.9	438.3
10°	448.6	445.3	431.3	426.0	424.3
12.5°	443.7	437.8	420.0	412.5	409.3
15°	437.3	427.6	407.1	396.9	392.6
17.5°	427.6	415.2	393.7	380.8	375.9
20°	418.4	401.8	378.6	362.5	358.2
22.5°	405.5	387.8	361.4	344.2	338.8
25°	393.2	372.2	343.7	325.4	319.5
27.5°	379.7	356.0	325.4	306.0	298.5
30°	364.1	338.8	307.1	286.7	278.6
32.5°	349.1	322.2	288.3	265.7	257.1
35°	333.5	303.3	269.5	245.3	236.6
37.5°	317.3	285.6	248.5	224.8	213.5
40°	301.2	267.8	229.7	202.8	193.1
42.5°	284.5	249.6	210.3	182.3	170.0
45°	265.7	231.3	190.4	160.8	149.0
47.5°	247.4	213.5	172.1	139.8	129.1
50°	228.0	194.7	152.7	121.6	114.6
52.5°	208.7	175.3	133.9	107.6	104.3
55°	189.3	157.6	115.6	97.3	94.7
57.5°	167.8	139.3	99.5	88.2	86.1
60°	146.3	119.4	85.5	79.6	78.0
62.5°	125.3	102.2	75.8	71.0	69.9
65°	105.4	85.0	66.7	62.9	62.4
67.5°	86.1	69.9	58.1	55.9	54.9
70°	66.7	55.9	50.0	48.9	47.9
72.5°	49.5	45.2	42.5	42.0	41.4
75°	34.4	36.0	35.0	35.0	35.0
77.5°	27.4	28.0	28.5	29.0	28.5
80°	19.9	21.5	22.1	23.1	22.6
82.5°	14.0	15.1	16.7	17.2	17.7
85°	8.6	9.1	10.8	11.8	11.8
87.5°	3.8	4.3	5.4	6.5	7.0
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	15.20	16.70	15.57	17.02	17.33	11.77	13.27	12.13	13.58	13.90
	3H	16.41	17.75	16.79	18.08	18.44	13.46	14.81	13.84	15.14	15.50
	4H	16.72	17.98	17.12	18.32	18.70	14.14	15.40	14.54	15.75	16.13
	6H	16.92	18.08	17.33	18.45	18.84	14.69	15.85	15.10	16.22	16.61
	8H	16.98	18.08	17.40	18.47	18.87	14.91	16.02	15.33	16.41	16.81
	12H	17.01	18.07	17.44	18.45	18.88	15.08	16.14	15.51	16.52	16.95
4H	2H	15.35	16.61	15.75	16.95	17.33	12.43	13.69	12.83	14.04	14.42
	3H	16.75	17.79	17.16	18.19	18.59	14.34	15.38	14.75	15.78	16.19
	4H	17.17	18.11	17.61	18.53	18.97	15.14	16.08	15.57	16.50	16.94
	6H	17.50	18.32	17.96	18.76	19.22	15.83	16.65	16.29	17.09	17.55
	8H	17.60	18.36	18.06	18.81	19.27	16.10	16.87	16.57	17.31	17.78
	12H	17.67	18.35	18.15	18.83	19.30	16.33	17.01	16.81	17.49	17.96
8H	4H	17.30	18.07	17.77	18.51	18.98	15.46	16.22	15.92	16.67	17.13
	6H	17.72	18.35	18.22	18.85	19.32	16.29	16.92	16.78	17.41	17.89
	8H	17.88	18.45	18.40	18.96	19.45	16.65	17.22	17.17	17.73	18.22
	12H	18.01	18.51	18.52	19.00	19.57	16.98	17.48	17.49	17.98	18.54
12H	4H	17.31	17.99	17.79	18.47	18.94	15.49	16.17	15.97	16.65	17.12
	6H	17.75	18.32	18.26	18.83	19.31	16.35	16.91	16.86	17.42	17.91
	8H	17.96	18.46	18.47	18.95	19.52	16.78	17.28	17.29	17.77	18.34