

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1062106

Luminaire Tested: S125RDR-H610D840-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062106
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-46)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H610D840-X4F0-XX-UDD-WVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

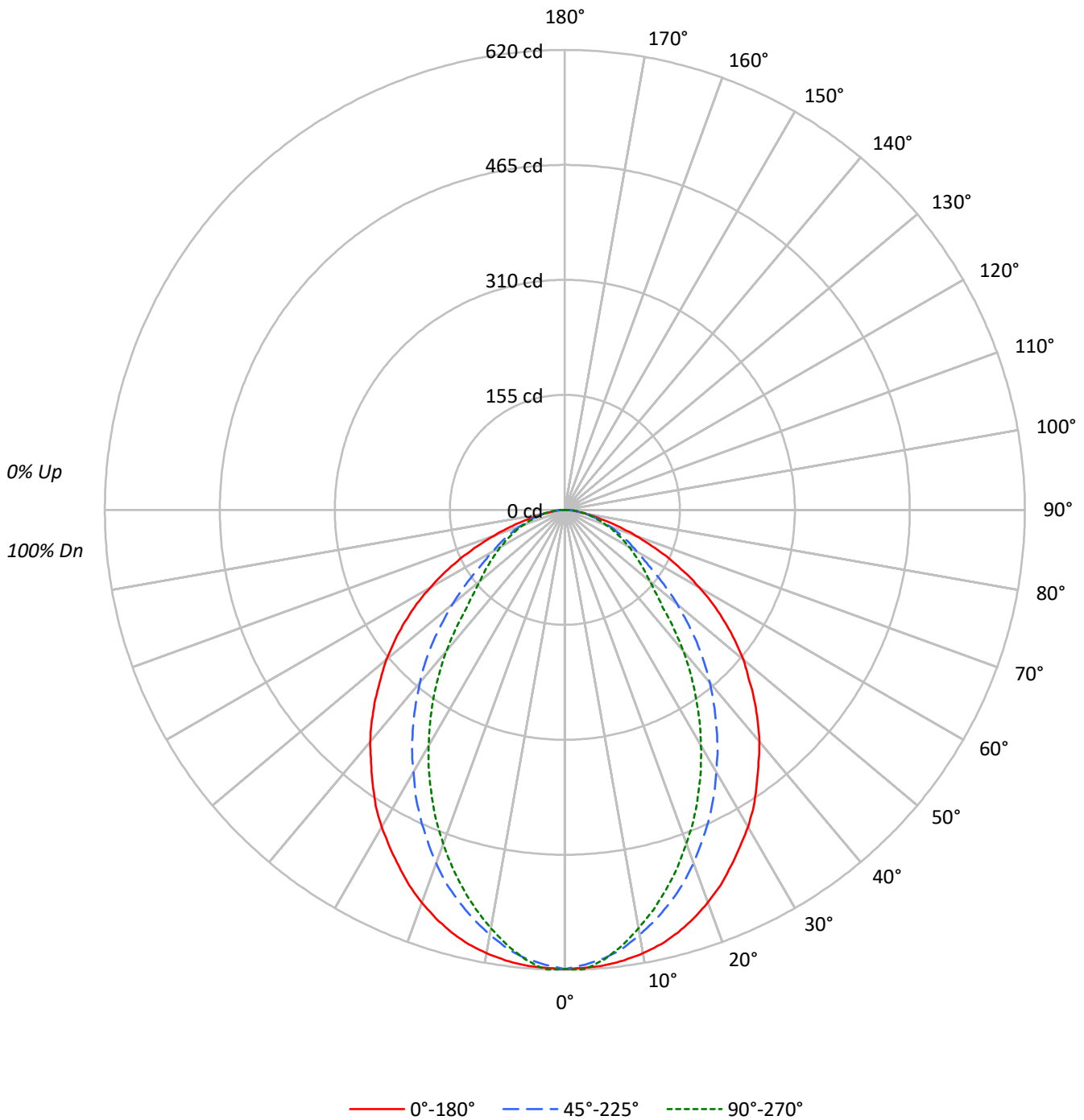
Lumens per Lamp: N/A
Luminaire Lumens: 1173.0 lumens
Efficiency: N/A
Efficacy: 67.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.4
Input Voltage (V): 120
Input Current (Ain): 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	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	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65				
4	86	76	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57				
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50				
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45				
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40				
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36				
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	33				
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4263	4263	4263
5°	4261	4196	4206
10°	4245	4066	4005
15°	4203	3906	3771
20°	4128	3715	3507
25°	4025	3494	3228
30°	3924	3245	2919
35°	3792	2995	2588
40°	3668	2731	2230
45°	3516	2442	1827
50°	3363	2118	1599
55°	3156	1767	1476
60°	2879	1546	1380
65°	2519	1413	1282
70°	2043	1272	1192
75°	1466	1163	1109
80°	1011	1039	1039
85°	743	901	956

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3516 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.6	4.9
10°-20°	155.7	13.3
20°-30°	215.2	18.3
30°-40°	229.3	19.5
40°-50°	201.4	17.2
50°-60°	152.7	13.0
60°-70°	99.2	8.5
70°-80°	49.1	4.2
80°-90°	12.9	1.1
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°	428.5	36.5
0°-40°	657.8	56.1
0°-60°	1011.9	86.3
0°-90°	1173.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1173.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	619	619	619	619	619	
5°	616	615	607	609	608	59
15°	590	576	548	535	529	166
25°	530	501	460	436	425	244
35°	451	410	356	324	308	282
45°	361	311	251	206	188	278
55°	263	211	147	127	123	235
65°	155	115	87	80	79	153
75°	55	48	44	42	42	61
85°	9	11	11	11	12	12
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	619.2	619.2	619.2	619.2	619.2
2.5°	617.9	619.2	613.9	618.6	619.9
5°	616.5	615.2	607.1	609.1	608.5
7.5°	612.5	609.8	596.4	595.0	592.3
10°	607.1	600.4	581.6	576.9	572.8
12.5°	599.7	589.0	566.1	556.7	552.0
15°	589.7	576.2	548.0	535.2	529.1
17.5°	577.5	558.7	529.1	511.7	504.9
20°	563.4	541.2	507.0	486.8	478.7
22.5°	548.0	521.7	483.4	461.9	453.2
25°	529.8	500.9	459.9	436.4	424.9
27.5°	511.7	479.4	435.0	408.8	396.7
30°	493.5	456.5	408.1	379.9	367.1
32.5°	474.0	433.0	383.2	352.3	337.5
35°	451.1	409.5	356.3	324.1	307.9
37.5°	429.0	384.6	330.1	293.8	278.4
40°	408.1	361.1	303.9	264.2	248.1
42.5°	384.6	336.2	277.7	236.0	217.8
45°	361.1	310.6	250.8	205.7	187.6
47.5°	336.2	286.4	222.5	178.2	166.1
50°	314.0	261.5	197.7	157.3	149.3
52.5°	288.4	237.3	172.1	141.2	135.8
55°	262.9	211.1	147.2	127.1	123.0
57.5°	236.7	187.6	127.7	115.0	110.9
60°	209.1	163.4	112.3	102.2	100.2
62.5°	181.5	138.5	98.8	91.4	88.8
65°	154.6	115.0	86.7	80.0	78.7
67.5°	127.1	93.5	74.6	69.9	69.3
70°	101.5	76.0	63.2	60.5	59.2
72.5°	78.0	60.5	53.1	51.1	50.4
75°	55.1	48.4	43.7	42.4	41.7
77.5°	37.0	37.0	35.0	33.6	34.3
80°	25.5	26.9	26.2	26.2	26.2
82.5°	16.8	18.2	18.8	18.8	18.8
85°	9.4	10.8	11.4	11.4	12.1
87.5°	3.4	4.0	4.7	5.4	5.4
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	15.59	17.08	15.96	17.40	17.71	11.83	13.33	12.20	13.64	13.95
	3H	16.90	18.24	17.28	18.57	18.93	13.42	14.75	13.80	15.08	15.44
	4H	17.27	18.53	17.67	18.87	19.25	14.02	15.27	14.42	15.62	16.00
	6H	17.45	18.60	17.86	18.97	19.36	14.49	15.65	14.90	16.01	16.41
	8H	17.49	18.59	17.91	18.98	19.38	14.65	15.75	15.08	16.14	16.54
	12H	17.50	18.55	17.93	18.93	19.36	14.76	15.82	15.19	16.20	16.63
4H	2H	15.70	16.96	16.10	17.31	17.68	12.49	13.75	12.89	14.10	14.48
	3H	17.19	18.23	17.60	18.63	19.03	14.28	15.31	14.69	15.71	16.12
	4H	17.67	18.60	18.10	19.02	19.45	14.99	15.93	15.43	16.34	16.78
	6H	17.95	18.76	18.41	19.21	19.67	15.58	16.39	16.04	16.84	17.30
	8H	18.02	18.78	18.49	19.22	19.69	15.79	16.55	16.25	16.99	17.46
	12H	18.06	18.74	18.54	19.22	19.69	15.94	16.62	16.42	17.10	17.57
8H	4H	17.75	18.51	18.21	18.95	19.42	15.31	16.06	15.77	16.51	16.98
	6H	18.11	18.74	18.61	19.23	19.71	16.01	16.64	16.51	17.13	17.61
	8H	18.23	18.79	18.74	19.30	19.79	16.29	16.85	16.80	17.36	17.85
	12H	18.32	18.81	18.83	19.30	19.87	16.52	17.01	17.03	17.51	18.07
12H	4H	17.74	18.42	18.23	18.90	19.37	15.33	16.01	15.81	16.49	16.96
	6H	18.12	18.68	18.63	19.19	19.68	16.06	16.62	16.58	17.13	17.62
	8H	18.28	18.77	18.79	19.26	19.83	16.40	16.89	16.91	17.39	17.95