

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: P1061899

Luminaire Tested: S125RDR-H1090D935-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061899
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-H1090D935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

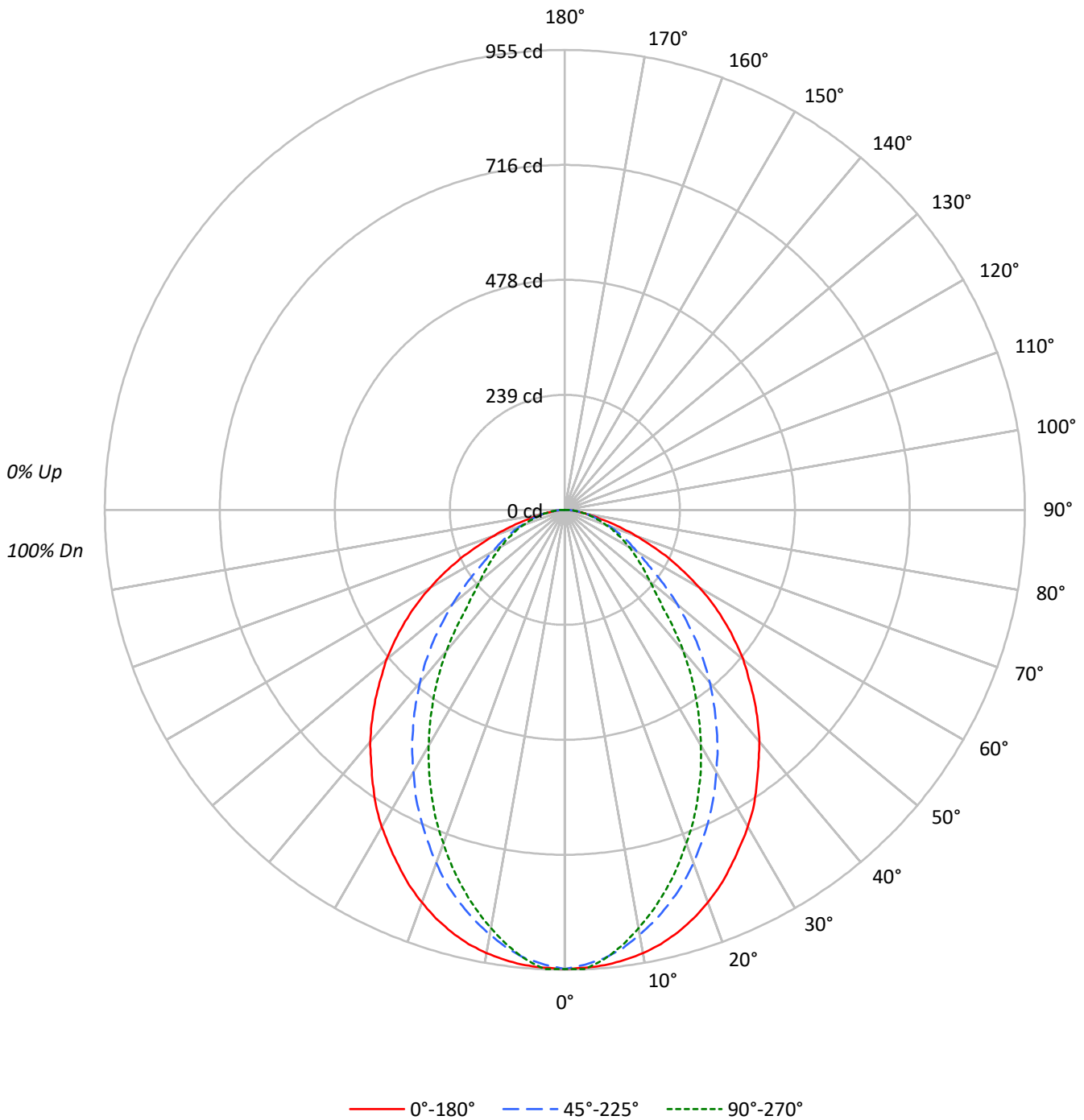
Lumens per Lamp: N/A
Luminaire Lumens: 1806.4 lumens
Efficiency: N/A
Efficacy: 57.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
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				100
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87				87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75				75
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65				65
4	86	76	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57				57
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50				50
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45				45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40				40
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36				36
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	33				33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30				30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6565	6565	6565
5°	6562	6462	6476
10°	6536	6262	6167
15°	6472	6015	5808
20°	6357	5720	5402
25°	6198	5380	4971
30°	6042	4996	4494
35°	5839	4612	3986
40°	5648	4206	3433
45°	5414	3761	2813
50°	5179	3261	2462
55°	4859	2721	2275
60°	4434	2381	2125
65°	3879	2177	1973
70°	3146	1959	1834
75°	2259	1790	1708
80°	1558	1602	1602
85°	1145	1390	1469

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5414 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.7	4.9
10°-20°	239.8	13.3
20°-30°	331.4	18.3
30°-40°	353.0	19.5
40°-50°	310.1	17.2
50°-60°	235.2	13.0
60°-70°	152.7	8.5
70°-80°	75.7	4.2
80°-90°	19.8	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°	659.9	36.5
0°-40°	1012.9	56.1
0°-60°	1558.2	86.3
0°-90°	1806.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1806.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	954	954	954	954	954	
5°	949	947	935	938	937	90
15°	908	887	844	824	815	256
25°	816	771	708	672	654	376
35°	695	630	549	499	474	435
45°	556	478	386	317	289	429
55°	405	325	227	196	190	361
65°	238	177	134	123	121	235
75°	85	74	67	65	64	95
85°	14	17	18	18	19	18
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	953.5	953.5	953.5	953.5	953.5
2.5°	951.5	953.5	945.3	952.5	954.6
5°	949.4	947.3	934.9	938.0	937.0
7.5°	943.2	939.0	918.3	916.3	912.1
10°	934.9	924.6	895.6	888.3	882.1
12.5°	923.5	907.0	871.8	857.3	850.0
15°	908.0	887.3	843.8	824.1	814.8
17.5°	889.4	860.4	814.8	787.9	777.5
20°	867.6	833.4	780.6	749.6	737.2
22.5°	843.8	803.4	744.4	711.3	697.8
25°	815.8	771.3	708.2	671.9	654.3
27.5°	787.9	738.2	669.9	629.5	610.8
30°	759.9	703.0	628.4	585.0	565.3
32.5°	729.9	666.8	590.1	542.5	519.7
35°	694.7	630.5	548.7	499.0	474.2
37.5°	660.5	592.2	508.3	452.4	428.6
40°	628.4	556.0	468.0	406.9	382.0
42.5°	592.2	517.7	427.6	363.4	335.4
45°	556.0	478.3	386.2	316.8	288.9
47.5°	517.7	441.1	342.7	274.4	255.7
50°	483.5	402.7	304.4	242.3	229.8
52.5°	444.2	365.5	265.0	217.4	209.1
55°	404.8	325.1	226.7	195.7	189.5
57.5°	364.4	288.9	196.7	177.0	170.8
60°	322.0	251.6	172.9	157.4	154.3
62.5°	279.5	213.3	152.2	140.8	136.7
65°	238.1	177.0	133.6	123.2	121.1
67.5°	195.7	143.9	114.9	107.7	106.6
70°	156.3	117.0	97.3	93.2	91.1
72.5°	120.1	93.2	81.8	78.7	77.7
75°	84.9	74.5	67.3	65.2	64.2
77.5°	56.9	56.9	53.8	51.8	52.8
80°	39.3	41.4	40.4	40.4	40.4
82.5°	25.9	28.0	29.0	29.0	29.0
85°	14.5	16.6	17.6	17.6	18.6
87.5°	5.2	6.2	7.2	8.3	8.3
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	17.09	18.58	17.46	18.90	19.21	13.33	14.82	13.70	15.14	15.45
	3H	18.40	19.74	18.78	20.07	20.43	14.91	16.25	15.29	16.58	16.94
	4H	18.77	20.03	19.17	20.37	20.75	15.52	16.77	15.92	17.12	17.50
	6H	18.95	20.10	19.36	20.47	20.86	15.99	17.15	16.40	17.51	17.91
	8H	18.98	20.08	19.41	20.47	20.88	16.15	17.25	16.58	17.64	18.04
	12H	19.00	20.05	19.43	20.43	20.86	16.26	17.31	16.69	17.70	18.13
4H	2H	17.20	18.46	17.60	18.81	19.18	13.99	15.25	14.39	15.60	15.97
	3H	18.69	19.73	19.10	20.13	20.53	15.78	16.81	16.19	17.21	17.62
	4H	19.17	20.10	19.60	20.52	20.95	16.49	17.43	16.93	17.84	18.28
	6H	19.45	20.26	19.91	20.70	21.17	17.08	17.89	17.54	18.34	18.80
	8H	19.52	20.28	19.98	20.72	21.19	17.29	18.05	17.75	18.49	18.96
	12H	19.56	20.24	20.04	20.72	21.19	17.44	18.12	17.93	18.60	19.07
8H	4H	19.25	20.01	19.71	20.45	20.92	16.80	17.56	17.27	18.01	18.47
	6H	19.61	20.24	20.11	20.73	21.21	17.51	18.14	18.01	18.63	19.11
	8H	19.73	20.29	20.24	20.80	21.29	17.79	18.35	18.31	18.86	19.35
	12H	19.82	20.31	20.33	20.80	21.37	18.02	18.52	18.53	19.01	19.57
12H	4H	19.24	19.92	19.73	20.40	20.87	16.83	17.51	17.31	17.98	18.46
	6H	19.61	20.18	20.13	20.69	21.18	17.56	18.12	18.08	18.63	19.12
	8H	19.77	20.27	20.29	20.76	21.33	17.90	18.39	18.41	18.89	19.45