

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: P1061998

Luminaire Tested: S125RDR-H1270D950-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061998
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-H1270D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

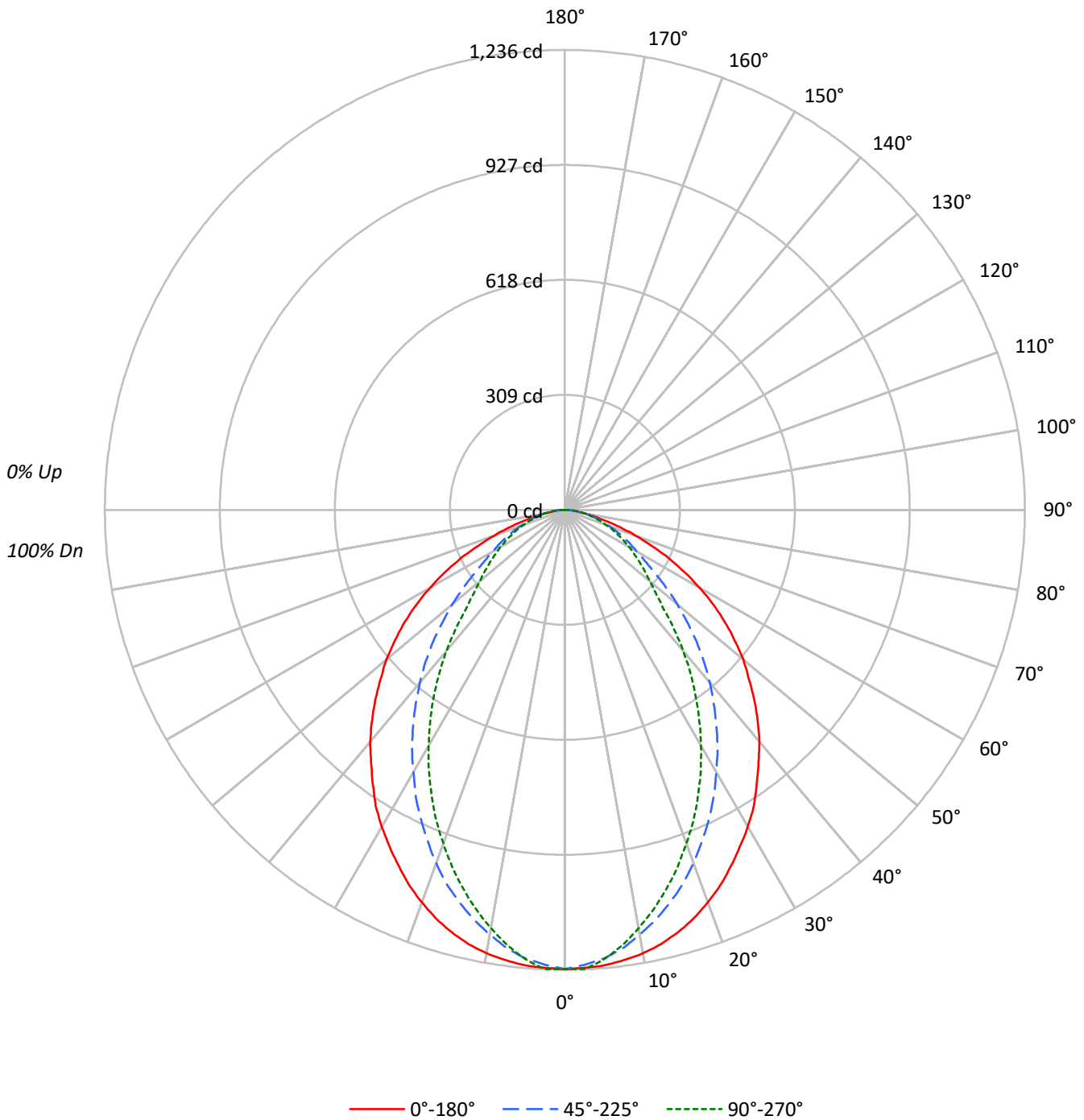
Lumens per Lamp: N/A
Luminaire Lumens: 2338.1 lumens
Efficiency: N/A
Efficacy: 64.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 36.5
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	75	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°	8498	8498	8498
5°	8494	8364	8382
10°	8460	8104	7983
15°	8378	7785	7518
20°	8228	7403	6992
25°	8022	6963	6434
30°	7820	6467	5817
35°	7558	5970	5159
40°	7311	5444	4445
45°	7007	4868	3641
50°	6703	4220	3187
55°	6290	3523	2943
60°	5740	3082	2750
65°	5021	2817	2555
70°	4075	2537	2373
75°	2924	2317	2211
80°	2018	2074	2074
85°	1485	1801	1904

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7007 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.7	4.9
10°-20°	310.4	13.3
20°-30°	429.0	18.3
30°-40°	457.0	19.5
40°-50°	401.4	17.2
50°-60°	304.4	13.0
60°-70°	197.6	8.5
70°-80°	97.9	4.2
80°-90°	25.6	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°	854.2	36.5
0°-40°	1311.1	56.1
0°-60°	2016.9	86.3
0°-90°	2338.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2338.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1234	1234	1234	1234	1234	
5°	1229	1226	1210	1214	1213	117
15°	1175	1148	1092	1067	1055	331
25°	1056	998	917	870	847	487
35°	899	816	710	646	614	563
45°	720	619	500	410	374	555
55°	524	421	294	253	245	467
65°	308	229	173	160	157	305
75°	110	96	87	84	83	123
85°	19	21	23	23	24	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1234.2	1234.2	1234.2	1234.2	1234.2
2.5°	1231.6	1234.2	1223.5	1232.9	1235.6
5°	1228.9	1226.2	1210.1	1214.1	1212.8
7.5°	1220.8	1215.5	1188.7	1186.0	1180.6
10°	1210.1	1196.7	1159.2	1149.8	1141.8
12.5°	1195.4	1173.9	1128.4	1109.6	1100.2
15°	1175.3	1148.5	1092.2	1066.7	1054.7
17.5°	1151.2	1113.6	1054.7	1019.8	1006.4
20°	1123.0	1078.8	1010.4	970.2	954.2
22.5°	1092.2	1039.9	963.5	920.7	903.2
25°	1056.0	998.4	916.6	869.7	846.9
27.5°	1019.8	955.5	867.0	814.8	790.7
30°	983.6	909.9	813.4	757.2	731.7
32.5°	944.8	863.0	763.9	702.2	672.7
35°	899.2	816.1	710.3	645.9	613.8
37.5°	855.0	766.5	658.0	585.6	554.8
40°	813.4	719.6	605.7	526.7	494.5
42.5°	766.5	670.1	553.5	470.4	434.2
45°	719.6	619.1	499.9	410.1	373.9
47.5°	670.1	570.9	443.6	355.1	331.0
50°	625.8	521.3	394.0	313.6	297.5
52.5°	574.9	473.1	343.1	281.4	270.7
55°	524.0	420.8	293.5	253.3	245.2
57.5°	471.7	373.9	254.6	229.2	221.1
60°	416.8	325.6	223.8	203.7	199.7
62.5°	361.8	276.1	197.0	182.3	176.9
65°	308.2	229.2	172.9	159.5	156.8
67.5°	253.3	186.3	148.8	139.4	138.0
70°	202.4	151.4	126.0	120.6	117.9
72.5°	155.5	120.6	105.9	101.8	100.5
75°	109.9	96.5	87.1	84.4	83.1
77.5°	73.7	73.7	69.7	67.0	68.3
80°	50.9	53.6	52.3	52.3	52.3
82.5°	33.5	36.2	37.5	37.5	37.5
85°	18.8	21.4	22.8	22.8	24.1
87.5°	6.7	8.0	9.4	10.7	10.7
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	17.99	19.48	18.35	19.79	20.11	14.23	15.72	14.60	16.04	16.35
	3H	19.30	20.64	19.68	20.96	21.33	15.81	17.15	16.19	17.48	17.84
	4H	19.67	20.92	20.07	21.27	21.65	16.42	17.67	16.82	18.02	18.40
	6H	19.84	21.00	20.26	21.37	21.76	16.89	18.04	17.30	18.41	18.80
	8H	19.88	20.98	20.31	21.37	21.77	17.05	18.15	17.47	18.54	18.94
	12H	19.89	20.95	20.32	21.33	21.76	17.16	18.21	17.59	18.59	19.02
4H	2H	18.10	19.35	18.50	19.70	20.08	14.89	16.14	15.29	16.49	16.87
	3H	19.59	20.62	20.00	21.03	21.43	16.67	17.71	17.08	18.11	18.51
	4H	20.06	21.00	20.50	21.41	21.85	17.39	18.32	17.82	18.74	19.18
	6H	20.35	21.16	20.81	21.60	22.06	17.98	18.79	18.44	19.23	19.69
	8H	20.42	21.17	20.88	21.62	22.09	18.18	18.94	18.65	19.39	19.85
	12H	20.46	21.13	20.94	21.61	22.08	18.34	19.01	18.82	19.49	19.96
8H	4H	20.15	20.90	20.61	21.35	21.82	17.70	18.46	18.17	18.90	19.37
	6H	20.51	21.13	21.01	21.63	22.10	18.41	19.03	18.91	19.52	20.00
	8H	20.62	21.19	21.14	21.70	22.18	18.69	19.25	19.20	19.76	20.25
	12H	20.71	21.21	21.22	21.70	22.27	18.92	19.41	19.43	19.90	20.47
12H	4H	20.14	20.82	20.62	21.29	21.77	17.73	18.40	18.21	18.88	19.35
	6H	20.51	21.07	21.03	21.58	22.07	18.46	19.02	18.97	19.53	20.02
	8H	20.67	21.17	21.18	21.66	22.22	18.80	19.29	19.31	19.78	20.35