

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: P1061985

Luminaire Tested: S125RDR-H1270D940-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061985
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-84)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H1270D940-X4F0-XX-UDD-BVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

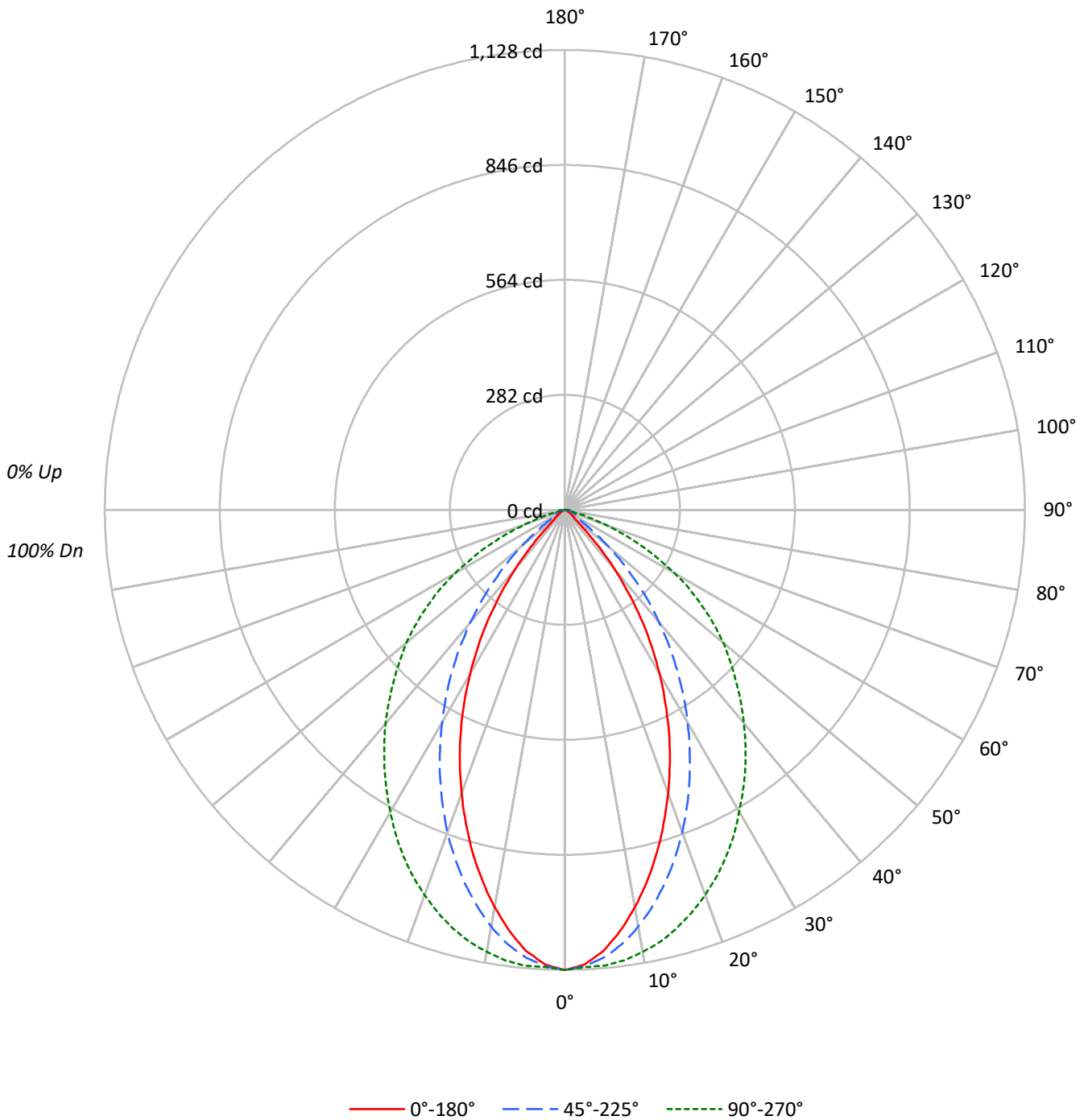
Lumens per Lamp: N/A
Luminaire Lumens: 1460.0 lumens
Efficiency: N/A
Efficacy: 40.0 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80				
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72				
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65				
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59				
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53				
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49				
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45				
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41				
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7770	7770	7770
5°	7505	7618	7756
10°	6917	7259	7697
15°	6212	6757	7570
20°	5421	6165	7368
25°	4592	5496	7116
30°	3688	4785	6799
35°	2730	4036	6481
40°	1691	3223	6142
45°	659	2356	5775
50°	308	1477	5439
55°	226	633	4937
60°	156	449	4283
65°	103	469	3330
70°	101	429	2096
75°	133	434	668
80°	198	496	448
85°	300	987	695

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5775 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.5	7.1
10°-20°	268.1	18.4
20°-30°	341.5	23.4
30°-40°	317.9	21.8
40°-50°	218.8	15.0
50°-60°	123.9	8.5
60°-70°	58.5	4.0
70°-80°	18.3	1.3
80°-90°	9.5	0.7
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°	713.2	48.8
0°-40°	1031.0	70.6
0°-60°	1373.7	94.1
0°-90°	1460.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1460.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1128	1128	1128	1128	1128	
5°	1086	1101	1102	1112	1122	101
15°	872	900	948	1019	1062	243
25°	604	643	724	845	937	276
35°	325	370	480	644	771	201
45°	68	108	242	438	593	64
55°	19	21	53	252	411	17
65°	6	8	29	90	204	7
75°	5	11	16	18	25	5
85°	4	10	12	11	9	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1128.5	1128.5	1128.5	1128.5	1128.5
2.5°	1116.0	1127.2	1119.7	1121.0	1122.2
5°	1085.9	1100.9	1102.2	1112.2	1122.2
7.5°	1042.0	1060.8	1074.6	1098.4	1114.7
10°	989.3	1011.9	1038.2	1077.1	1100.9
12.5°	932.9	959.2	995.6	1050.8	1084.6
15°	871.5	900.3	947.9	1019.4	1062.0
17.5°	806.3	838.9	896.5	981.8	1035.7
20°	739.8	774.9	841.4	939.2	1005.6
22.5°	673.3	709.7	783.7	892.8	973.0
25°	604.4	643.2	723.5	845.1	936.7
27.5°	534.2	574.3	663.3	796.2	897.8
30°	463.9	506.6	601.9	746.1	855.2
32.5°	395.0	437.6	541.7	695.9	813.8
35°	324.8	369.9	480.2	644.5	771.1
37.5°	254.5	303.4	420.1	591.8	727.3
40°	188.1	234.5	358.6	540.4	683.4
42.5°	125.4	170.5	303.4	489.0	638.2
45°	67.7	107.8	242.0	437.6	593.1
47.5°	36.4	57.7	189.3	387.5	549.2
50°	28.8	32.6	137.9	341.1	507.8
52.5°	23.8	26.3	90.3	297.2	460.2
55°	18.8	21.3	52.7	252.0	411.3
57.5°	15.0	17.6	33.9	209.4	363.6
60°	11.3	13.8	32.6	168.0	311.0
62.5°	8.8	10.0	30.1	129.2	255.8
65°	6.3	7.5	28.8	90.3	204.4
67.5°	5.0	6.3	26.3	57.7	153.0
70°	5.0	5.0	21.3	37.6	104.1
72.5°	5.0	8.8	18.8	25.1	62.7
75°	5.0	11.3	16.3	17.6	25.1
77.5°	5.0	12.5	13.8	13.8	13.8
80°	5.0	11.3	12.5	12.5	11.3
82.5°	5.0	10.0	11.3	12.5	10.0
85°	3.8	10.0	12.5	11.3	8.8
87.5°	3.8	10.0	11.3	10.0	6.3
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	0.00	0.00	0.00	0.00	0.00	16.37	17.66	16.73	17.97	18.29
	3H	0.00	0.00	0.00	0.02	0.39	17.09	18.23	17.47	18.56	18.93
	4H	0.00	0.51	0.00	0.86	1.24	17.11	18.17	17.51	18.53	18.91
	6H	0.70	1.68	1.12	2.05	2.44	17.06	18.04	17.48	18.41	18.80
	8H	1.34	2.26	1.77	2.66	3.06	17.04	17.96	17.47	18.35	18.76
	12H	1.94	2.82	2.37	3.20	3.63	17.02	17.90	17.46	18.29	18.72
4H	2H	0.88	1.94	1.28	2.29	2.68	16.16	17.22	16.56	17.57	17.96
	3H	1.69	2.56	2.10	2.96	3.36	16.92	17.78	17.33	18.19	18.59
	4H	2.70	3.47	3.13	3.89	4.34	16.95	17.72	17.38	18.14	18.58
	6H	3.97	4.64	4.44	5.09	5.56	16.92	17.59	17.39	18.04	18.51
	8H	4.55	5.18	5.02	5.62	6.09	16.91	17.53	17.38	17.98	18.45
	12H	5.12	5.67	5.60	6.15	6.63	16.92	17.46	17.40	17.95	18.42
8H	4H	4.11	4.74	4.58	5.18	5.66	16.83	17.45	17.30	17.90	18.37
	6H	5.67	6.18	6.18	6.68	7.16	16.82	17.33	17.32	17.82	18.30
	8H	6.46	6.92	6.99	7.44	7.93	16.83	17.29	17.35	17.80	18.29
	12H	7.30	7.71	7.82	8.20	8.77	16.89	17.29	17.41	17.79	18.36
12H	4H	4.33	4.88	4.82	5.37	5.84	16.79	17.34	17.27	17.82	18.29
	6H	6.04	6.50	6.57	7.02	7.51	16.77	17.23	17.29	17.74	18.24
	8H	7.03	7.43	7.55	7.93	8.50	16.82	17.22	17.33	17.72	18.29