

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: P1175403

Luminaire Tested: S125RDRP-H1270D840-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2024
Report Number: P1175403
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-82)
Test Lab: INNOVATION CENTER
Issue Date: 8/18/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-H1270D840-X4F0-XX-UDD-WVL-W
Description: DEFINE 5 WHITE 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

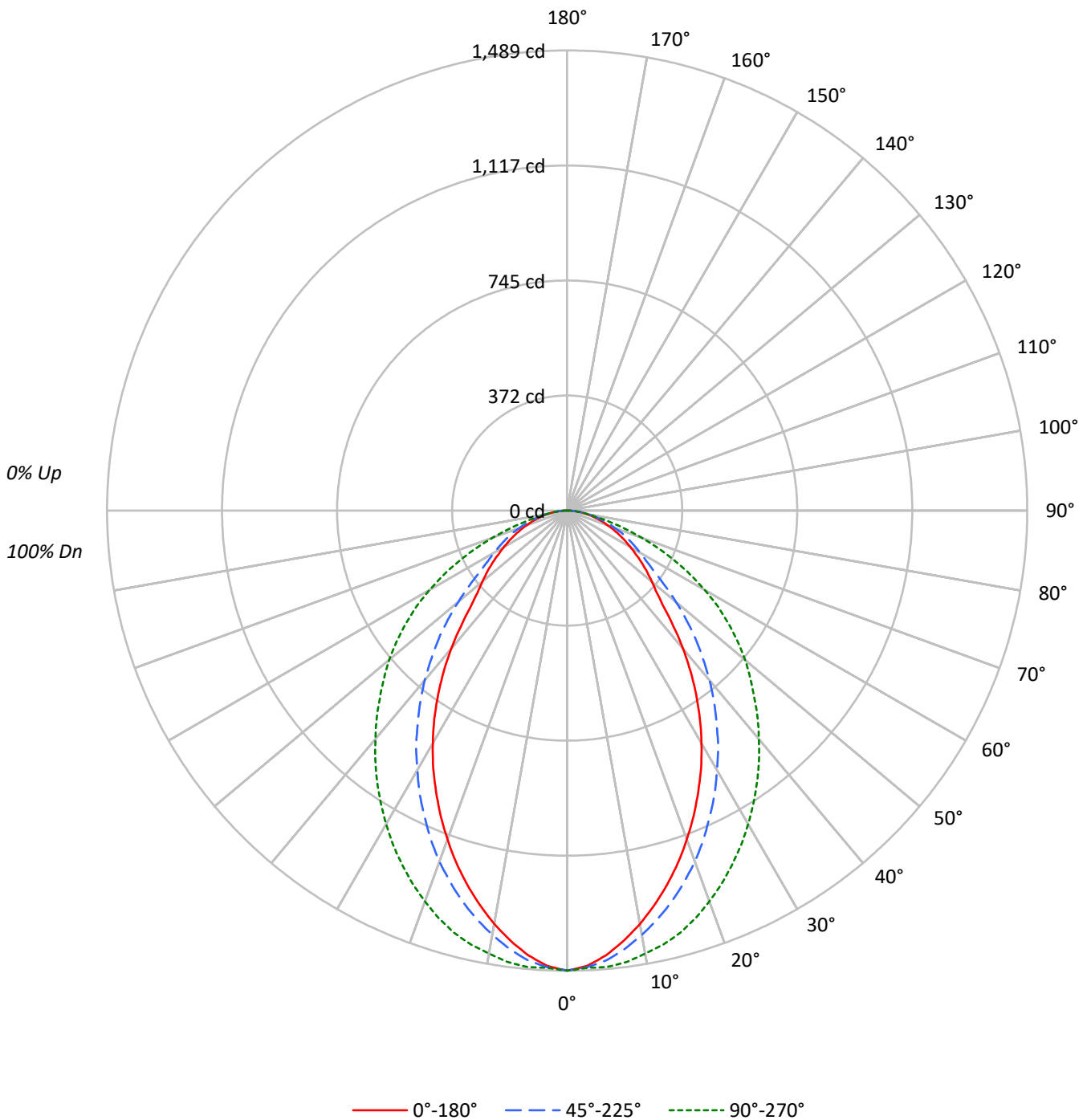
Lumens per Lamp: N/A
Luminaire Lumens: 2804.4 lumens
Efficiency: N/A
Efficacy: 76.8 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 36.5
Input Voltage (V): 120
Input Current (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	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	107	104	100	97	99	97	94	96	93	91	92	90	88	86
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10249	10249	10249
5°	9983	10096	10245
10°	9497	9745	10177
15°	8927	9332	10079
20°	8296	8852	9861
25°	7623	8294	9600
30°	6912	7706	9313
35°	6118	7085	9007
40°	5247	6440	8677
45°	4307	5734	8343
50°	3830	4927	8054
55°	3534	4126	7645
60°	3254	3759	7082
65°	3027	3542	6259
70°	2824	3308	5113
75°	2655	3059	3833
80°	2506	2807	2756
85°	2299	2797	2299

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8343 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.8	4.9
10°-20°	371.5	13.2
20°-30°	511.0	18.2
30°-40°	542.0	19.3
40°-50°	474.4	16.9
50°-60°	364.0	13.0
60°-70°	242.5	8.6
70°-80°	124.3	4.4
80°-90°	36.9	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°	1020.3	36.4
0°-40°	1562.3	55.7
0°-60°	2400.7	85.6
0°-90°	2804.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2804.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1489	1489	1489	1489	1489	
5°	1444	1463	1461	1471	1482	135
15°	1252	1281	1309	1371	1414	351
25°	1003	1038	1092	1184	1264	461
35°	728	762	843	967	1072	454
45°	442	479	589	736	857	349
55°	294	301	344	510	637	264
65°	186	187	217	286	384	185
75°	100	106	115	121	144	106
85°	29	33	35	34	29	33
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1488.6	1488.6	1488.6	1488.6	1488.6
2.5°	1474.7	1489.9	1478.5	1479.8	1481.0
5°	1444.4	1463.3	1460.8	1470.9	1482.3
7.5°	1403.9	1424.2	1430.5	1455.7	1473.4
10°	1358.4	1381.2	1393.8	1431.7	1455.7
12.5°	1306.6	1333.2	1353.4	1402.7	1438.1
15°	1252.3	1281.4	1309.2	1371.1	1414.0
17.5°	1194.2	1223.2	1259.9	1330.6	1382.5
20°	1132.2	1163.8	1208.1	1283.9	1345.8
22.5°	1069.1	1101.9	1152.5	1235.9	1306.6
25°	1003.4	1037.5	1091.8	1184.1	1263.7
27.5°	938.9	970.5	1033.7	1132.2	1219.4
30°	869.4	902.3	969.2	1077.9	1171.4
32.5°	799.9	832.8	909.8	1023.6	1122.1
35°	727.9	762.0	842.9	966.7	1071.6
37.5°	655.8	691.2	780.9	908.6	1019.8
40°	583.8	621.7	716.5	850.4	965.4
42.5°	510.5	551.0	650.8	793.6	912.4
45°	442.3	478.9	588.9	735.5	856.8
47.5°	393.0	414.5	523.2	676.1	803.7
50°	357.6	367.7	460.0	619.2	751.9
52.5°	326.0	332.3	398.1	566.1	695.0
55°	294.4	300.8	343.7	510.5	636.9
57.5°	264.1	267.9	303.3	454.9	578.8
60°	236.3	238.8	273.0	399.3	514.3
62.5°	211.0	212.3	243.9	342.5	449.9
65°	185.8	187.0	217.4	285.6	384.2
67.5°	163.0	163.0	192.1	233.8	321.0
70°	140.3	140.3	164.3	189.6	254.0
72.5°	120.0	122.6	139.0	152.9	198.4
75°	99.8	106.1	115.0	121.3	144.1
77.5°	80.9	88.5	92.2	94.8	96.0
80°	63.2	68.2	70.8	72.0	69.5
82.5°	46.8	50.5	51.8	51.8	48.0
85°	29.1	32.9	35.4	34.1	29.1
87.5°	13.9	19.0	20.2	17.7	13.9
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	14.70	16.20	15.07	16.51	16.83	18.73	20.22	19.09	20.54	20.85
	3H	16.29	17.63	16.67	17.96	18.32	20.11	21.46	20.49	21.79	22.15
	4H	16.93	18.19	17.33	18.54	18.92	20.52	21.78	20.92	22.13	22.51
	6H	17.44	18.60	17.85	18.97	19.36	20.73	21.89	21.14	22.26	22.65
	8H	17.62	18.73	18.05	19.12	19.52	20.78	21.89	21.21	22.28	22.68
	12H	17.75	18.81	18.18	19.19	19.62	20.82	21.88	21.25	22.26	22.69
4H	2H	15.47	16.73	15.87	17.08	17.46	18.86	20.12	19.26	20.46	20.84
	3H	17.25	18.30	17.66	18.70	19.10	20.43	21.47	20.84	21.87	22.27
	4H	18.02	18.96	18.45	19.38	19.82	20.94	21.88	21.37	22.29	22.73
	6H	18.66	19.48	19.12	19.92	20.38	21.26	22.08	21.72	22.52	22.98
	8H	18.89	19.66	19.35	20.10	20.57	21.36	22.13	21.82	22.57	23.04
	12H	19.06	19.75	19.54	20.22	20.70	21.43	22.12	21.92	22.60	23.07
8H	4H	18.40	19.17	18.87	19.61	20.08	21.04	21.80	21.50	22.25	22.71
	6H	19.18	19.81	19.68	20.31	20.78	21.45	22.09	21.95	22.58	23.06
	8H	19.50	20.07	20.01	20.58	21.06	21.61	22.18	22.13	22.69	23.18
	12H	19.76	20.26	20.27	20.75	21.32	21.75	22.25	22.26	22.75	23.31
12H	4H	18.44	19.13	18.93	19.61	20.08	21.03	21.72	21.52	22.20	22.67
	6H	19.26	19.82	19.77	20.33	20.82	21.47	22.04	21.98	22.55	23.03
	8H	19.64	20.14	20.15	20.63	21.20	21.68	22.18	22.19	22.67	23.24