

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: P1175395

Luminaire Tested: S125RDRP-H1090D850-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2024
Report Number: P1175395
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-H1090D850-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: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

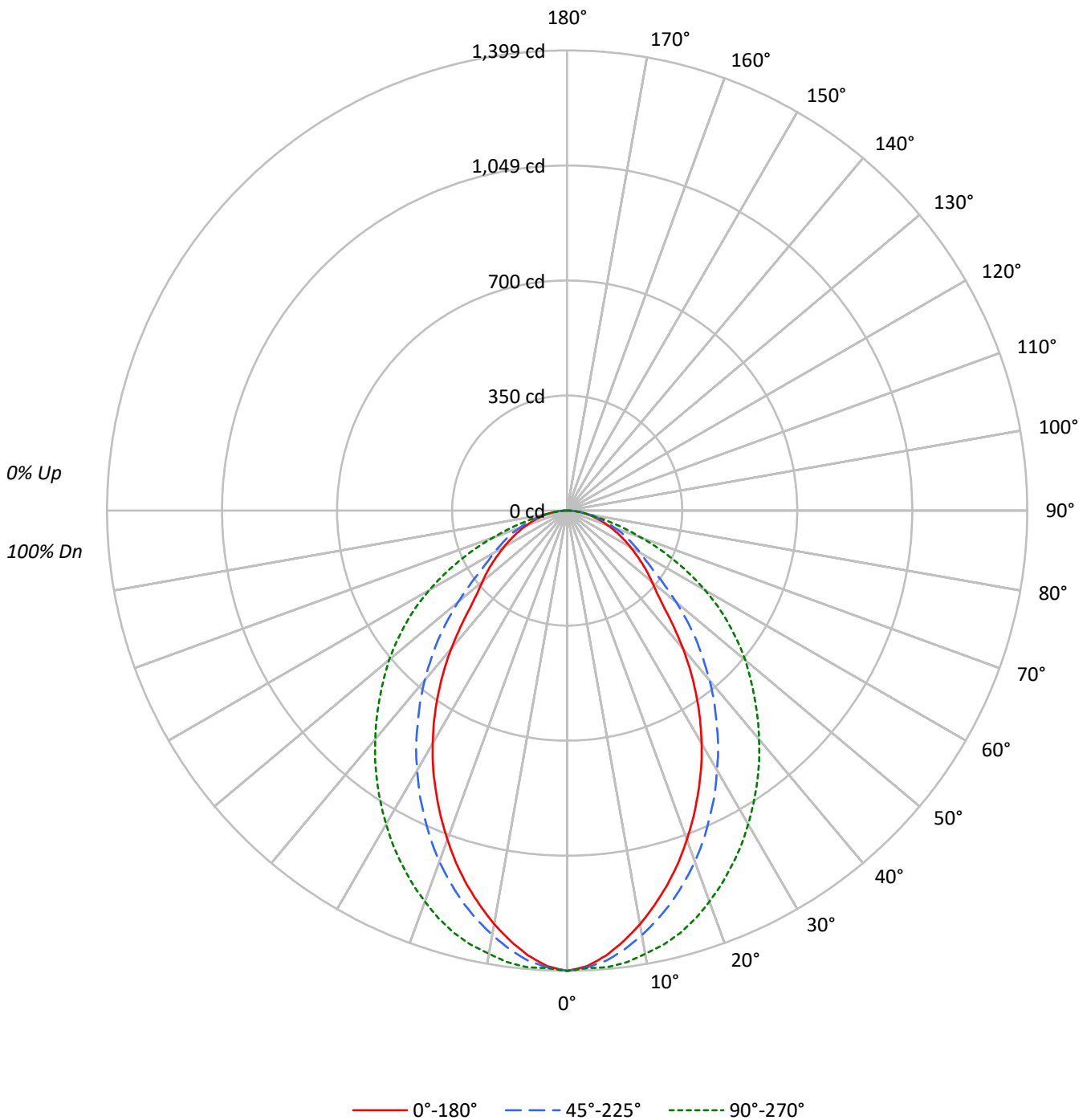
Lumens per Lamp: N/A
Luminaire Lumens: 2636.3 lumens
Efficiency: N/A
Efficacy: 84.5 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
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°	9635	9635	9635
5°	9384	9491	9631
10°	8928	9161	9568
15°	8391	8773	9475
20°	7799	8321	9270
25°	7166	7798	9025
30°	6498	7244	8755
35°	5751	6660	8468
40°	4933	6054	8158
45°	4049	5391	7842
50°	3601	4632	7571
55°	3323	3879	7187
60°	3058	3534	6658
65°	2845	3328	5883
70°	2655	3108	4807
75°	2495	2876	3602
80°	2355	2637	2589
85°	2157	2631	2157

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7842 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.6	4.9
10°-20°	349.2	13.2
20°-30°	480.4	18.2
30°-40°	509.5	19.3
40°-50°	446.0	16.9
50°-60°	342.2	13.0
60°-70°	227.9	8.6
70°-80°	116.9	4.4
80°-90°	34.7	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°	959.1	36.4
0°-40°	1468.7	55.7
0°-60°	2256.8	85.6
0°-90°	2636.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2636.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1399	1399	1399	1399	1399	
5°	1358	1376	1373	1383	1393	127
15°	1177	1205	1231	1289	1329	330
25°	943	975	1026	1113	1188	433
35°	684	716	792	909	1007	426
45°	416	450	554	691	805	328
55°	277	283	323	480	599	248
65°	175	176	204	268	361	174
75°	94	100	108	114	135	100
85°	27	31	33	32	27	31
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1399.4	1399.4	1399.4	1399.4	1399.4
2.5°	1386.3	1400.6	1389.9	1391.1	1392.2
5°	1357.8	1375.6	1373.2	1382.7	1393.4
7.5°	1319.8	1338.8	1344.7	1368.5	1385.1
10°	1277.0	1298.4	1310.3	1345.9	1368.5
12.5°	1228.3	1253.3	1272.3	1318.6	1351.9
15°	1177.2	1204.6	1230.7	1288.9	1329.3
17.5°	1122.6	1149.9	1184.4	1250.9	1299.6
20°	1064.4	1094.1	1135.7	1206.9	1265.1
22.5°	1005.0	1035.9	1083.4	1161.8	1228.3
25°	943.2	975.3	1026.4	1113.1	1187.9
27.5°	882.6	912.3	971.7	1064.4	1146.3
30°	817.3	848.2	911.1	1013.3	1101.2
32.5°	752.0	782.8	855.3	962.2	1054.9
35°	684.2	716.3	792.3	908.8	1007.4
37.5°	616.5	649.8	734.1	854.1	958.7
40°	548.8	584.5	673.6	799.5	907.6
42.5°	479.9	517.9	611.8	746.0	857.7
45°	415.8	450.2	553.6	691.4	805.4
47.5°	369.4	389.6	491.8	635.5	755.5
50°	336.2	345.7	432.4	582.1	706.8
52.5°	306.5	312.4	374.2	532.2	653.4
55°	276.8	282.7	323.1	479.9	598.7
57.5°	248.3	251.8	285.1	427.7	544.1
60°	222.1	224.5	256.6	375.4	483.5
62.5°	198.4	199.6	229.3	321.9	422.9
65°	174.6	175.8	204.3	268.5	361.1
67.5°	153.2	153.2	180.6	219.8	301.7
70°	131.9	131.9	154.4	178.2	238.8
72.5°	112.9	115.2	130.7	143.7	186.5
75°	93.8	99.8	108.1	114.0	135.4
77.5°	76.0	83.2	86.7	89.1	90.3
80°	59.4	64.1	66.5	67.7	65.3
82.5°	44.0	47.5	48.7	48.7	45.1
85°	27.3	30.9	33.3	32.1	27.3
87.5°	13.1	17.8	19.0	16.6	13.1
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	14.49	15.98	14.85	16.30	16.61	18.51	20.01	18.88	20.32	20.64
	3H	16.07	17.42	16.45	17.74	18.11	19.90	21.24	20.28	21.57	21.93
	4H	16.72	17.98	17.12	18.33	18.70	20.30	21.57	20.70	21.91	22.29
	6H	17.22	18.39	17.64	18.76	19.15	20.51	21.67	20.92	22.04	22.43
	8H	17.41	18.51	17.83	18.90	19.31	20.57	21.68	20.99	22.07	22.47
	12H	17.53	18.59	17.96	18.97	19.40	20.60	21.66	21.03	22.04	22.47
4H	2H	15.25	16.52	15.65	16.86	17.24	18.64	19.90	19.04	20.25	20.63
	3H	17.04	18.08	17.45	18.48	18.89	20.21	21.26	20.62	21.66	22.06
	4H	17.81	18.75	18.24	19.16	19.60	20.72	21.66	21.15	22.08	22.52
	6H	18.45	19.26	18.90	19.71	20.17	21.05	21.87	21.50	22.31	22.77
	8H	18.67	19.44	19.14	19.88	20.35	21.15	21.91	21.61	22.36	22.82
	12H	18.85	19.53	19.33	20.01	20.48	21.22	21.90	21.70	22.38	22.85
8H	4H	18.19	18.95	18.65	19.40	19.87	20.82	21.59	21.28	22.03	22.50
	6H	18.97	19.60	19.46	20.09	20.57	21.24	21.87	21.74	22.36	22.84
	8H	19.28	19.85	19.80	20.36	20.85	21.40	21.97	21.91	22.48	22.97
	12H	19.54	20.05	20.05	20.54	21.10	21.54	22.04	22.05	22.53	23.10
12H	4H	18.23	18.91	18.71	19.39	19.86	20.82	21.50	21.30	21.98	22.45
	6H	19.04	19.61	19.55	20.12	20.61	21.25	21.82	21.77	22.33	22.82
	8H	19.42	19.93	19.93	20.42	20.98	21.46	21.96	21.97	22.46	23.02