

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: P1175349

Luminaire Tested: S125RDRP-S1090D840-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2024
Report Number: P1175349
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-S1090D840-X4F0-XX-UDD-WVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

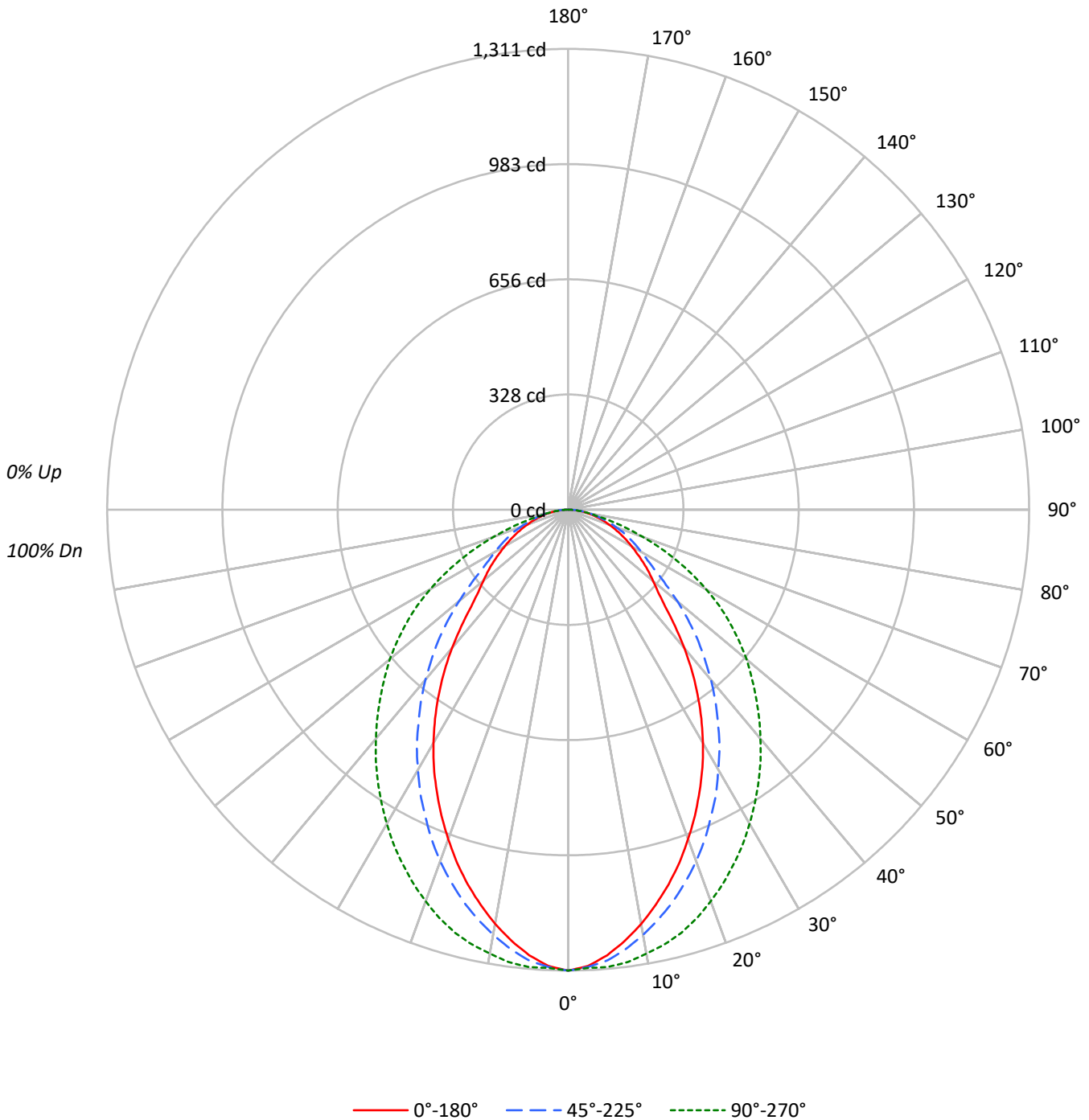
Lumens per Lamp: N/A
Luminaire Lumens: 2470.3 lumens
Efficiency: N/A
Efficacy: 70.6 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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°	9028	9028	9028
5°	8794	8894	9024
10°	8366	8584	8965
15°	7863	8220	8879
20°	7307	7797	8686
25°	6714	7306	8456
30°	6088	6788	8204
35°	5389	6240	7934
40°	4623	5672	7643
45°	3794	5051	7349
50°	3374	4340	7094
55°	3114	3635	6734
60°	2867	3310	6238
65°	2665	3120	5513
70°	2488	2913	4503
75°	2338	2695	3376
80°	2209	2470	2427
85°	2022	2465	2022

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7349 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.4	4.9
10°-20°	327.2	13.2
20°-30°	450.1	18.2
30°-40°	477.4	19.3
40°-50°	417.9	16.9
50°-60°	320.6	13.0
60°-70°	213.6	8.6
70°-80°	109.5	4.4
80°-90°	32.5	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°	898.7	36.4
0°-40°	1376.2	55.7
0°-60°	2114.7	85.6
0°-90°	2470.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2470.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1311	1311	1311	1311	1311	
5°	1272	1289	1287	1296	1306	119
15°	1103	1129	1153	1208	1246	309
25°	884	914	962	1043	1113	406
35°	641	671	742	852	944	400
45°	390	422	519	648	755	308
55°	259	265	303	450	561	233
65°	164	165	192	252	338	163
75°	88	94	101	107	127	93
85°	26	29	31	30	26	29
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1311.2	1311.2	1311.2	1311.2	1311.2
2.5°	1299.0	1312.4	1302.3	1303.5	1304.6
5°	1272.3	1289.0	1286.8	1295.7	1305.7
7.5°	1236.7	1254.5	1260.0	1282.3	1297.9
10°	1196.6	1216.6	1227.8	1261.2	1282.3
12.5°	1151.0	1174.3	1192.1	1235.6	1266.7
15°	1103.1	1128.7	1153.2	1207.7	1245.6
17.5°	1051.9	1077.5	1109.8	1172.1	1217.7
20°	997.3	1025.2	1064.1	1130.9	1185.5
22.5°	941.7	970.6	1015.2	1088.6	1151.0
25°	883.8	913.9	961.7	1043.0	1113.1
27.5°	827.0	854.9	910.5	997.3	1074.2
30°	765.8	794.8	853.8	949.5	1031.9
32.5°	704.6	733.5	801.4	901.6	988.4
35°	641.2	671.2	742.4	851.5	943.9
37.5°	577.7	608.9	687.9	800.3	898.3
40°	514.3	547.6	631.1	749.1	850.4
42.5°	449.7	485.3	573.3	699.0	803.7
45°	389.6	421.9	518.7	647.8	754.7
47.5°	346.2	365.1	460.8	595.5	707.9
50°	315.0	323.9	405.2	545.4	662.3
52.5°	287.2	292.7	350.6	498.7	612.2
55°	259.4	264.9	302.8	449.7	561.0
57.5°	232.6	236.0	267.1	400.7	509.8
60°	208.2	210.4	240.4	351.7	453.0
62.5°	185.9	187.0	214.8	301.7	396.3
65°	163.6	164.7	191.5	251.6	338.4
67.5°	143.6	143.6	169.2	205.9	282.7
70°	123.6	123.6	144.7	167.0	223.7
72.5°	105.7	108.0	122.4	134.7	174.8
75°	87.9	93.5	101.3	106.9	126.9
77.5°	71.2	77.9	81.3	83.5	84.6
80°	55.7	60.1	62.3	63.4	61.2
82.5°	41.2	44.5	45.6	45.6	42.3
85°	25.6	28.9	31.2	30.1	25.6
87.5°	12.2	16.7	17.8	15.6	12.2
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	14.26	15.76	14.63	16.07	16.39	18.29	19.78	18.65	20.10	20.41
	3H	15.85	17.19	16.23	17.52	17.88	19.67	21.02	20.05	21.34	21.71
	4H	16.49	17.75	16.89	18.10	18.48	20.08	21.34	20.48	21.69	22.07
	6H	17.00	18.16	17.41	18.53	18.92	20.28	21.45	20.70	21.82	22.21
	8H	17.18	18.29	17.61	18.68	19.08	20.34	21.45	20.77	21.84	22.24
	12H	17.31	18.37	17.74	18.75	19.18	20.37	21.44	20.81	21.82	22.25
4H	2H	15.03	16.29	15.43	16.64	17.02	18.41	19.68	18.81	20.02	20.40
	3H	16.81	17.86	17.22	18.26	18.66	19.98	21.03	20.40	21.43	21.83
	4H	17.58	18.52	18.01	18.94	19.38	20.49	21.44	20.93	21.85	22.29
	6H	18.22	19.04	18.68	19.48	19.94	20.82	21.64	21.28	22.08	22.54
	8H	18.45	19.21	18.91	19.66	20.13	20.92	21.69	21.38	22.13	22.60
	12H	18.62	19.30	19.10	19.78	20.25	20.99	21.68	21.47	22.15	22.63
8H	4H	17.96	18.73	18.43	19.17	19.64	20.59	21.36	21.06	21.80	22.27
	6H	18.74	19.37	19.24	19.86	20.34	21.01	21.65	21.51	22.14	22.62
	8H	19.06	19.62	19.57	20.13	20.62	21.17	21.74	21.69	22.25	22.74
	12H	19.32	19.82	19.83	20.31	20.88	21.31	21.81	21.82	22.30	22.87
12H	4H	18.00	18.69	18.49	19.17	19.64	20.59	21.28	21.08	21.76	22.23
	6H	18.81	19.38	19.33	19.89	20.38	21.03	21.59	21.54	22.10	22.59
	8H	19.20	19.70	19.71	20.19	20.76	21.24	21.74	21.75	22.23	22.79