

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: P1175349

Luminaire Tested: S125RDR-S1090D840-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2019
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: S125RDR-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

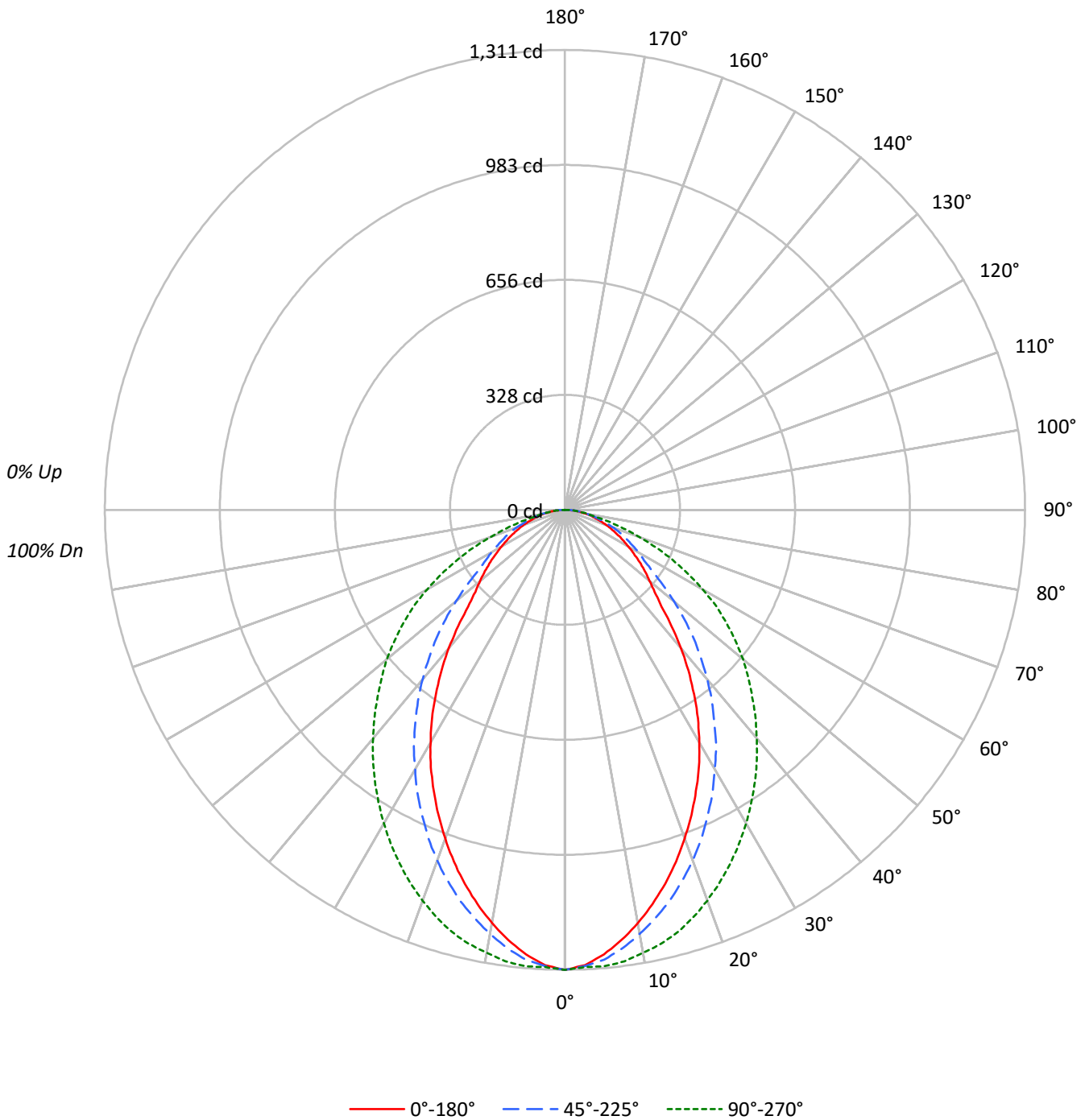
Lumens per Lamp: N/A
Luminaire Lumens: 2470.3 lumens
Efficiency: N/A
Efficacy: 70.6 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
Input Voltage (V): 120
Input Current (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	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

(END OF REPORT)