

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: P1061823

Luminaire Tested: S125RDR-S850D940-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061823
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-S850D940-X4F0-XX-UDD-BVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

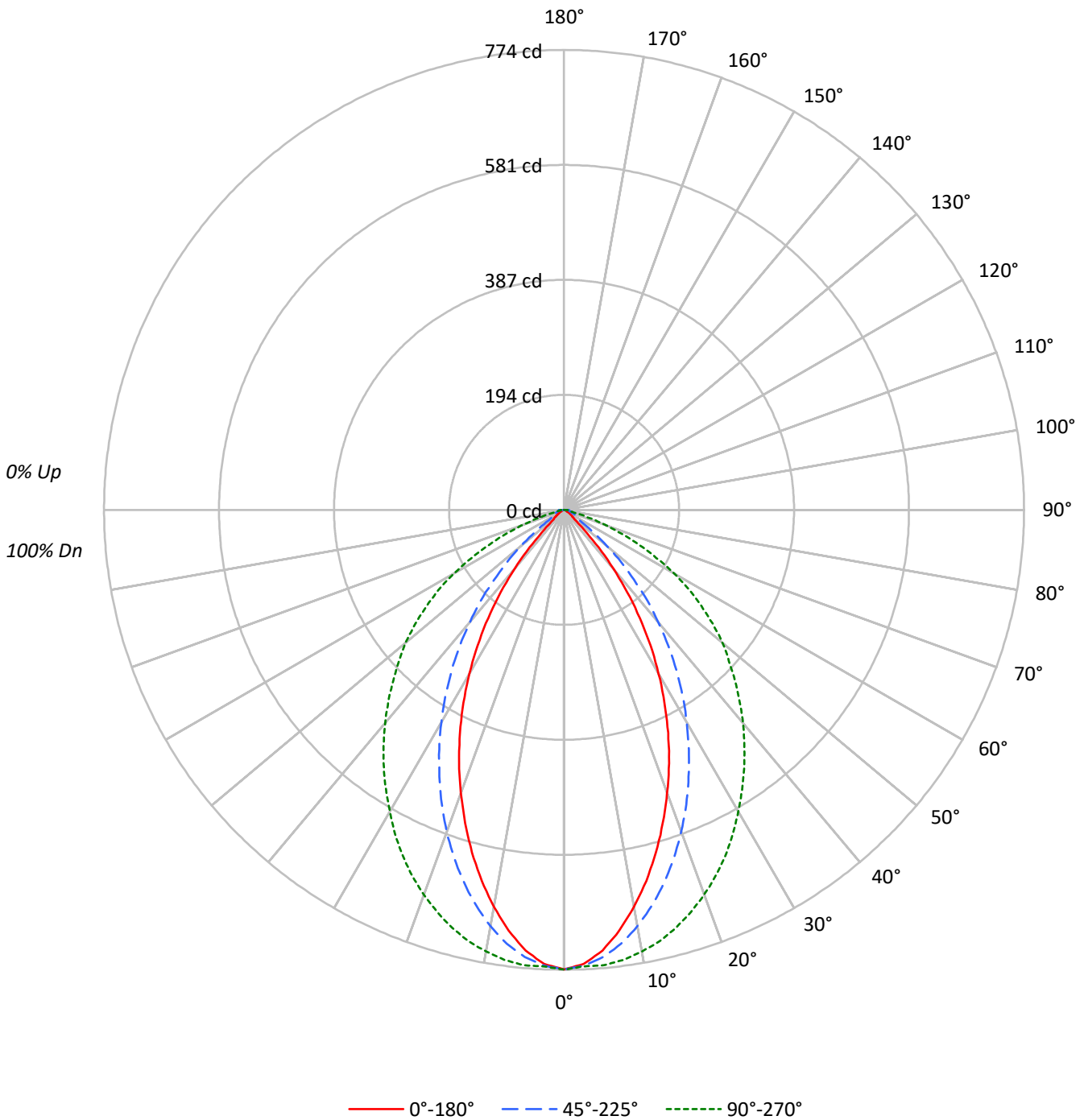
Lumens per Lamp: N/A
Luminaire Lumens: 1000.8 lumens
Efficiency: N/A
Efficacy: 38.8 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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	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°	5326	5326	5326
5°	5144	5222	5316
10°	4741	4976	5276
15°	4258	4632	5189
20°	3716	4226	5051
25°	3147	3767	4877
30°	2528	3280	4661
35°	1871	2767	4443
40°	1159	2209	4210
45°	452	1615	3958
50°	212	1012	3729
55°	155	433	3384
60°	106	307	2936
65°	70	323	2282
70°	68	294	1435
75°	90	298	458
80°	135	341	305
85°	205	679	474

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3958 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.9	7.1
10°-20°	183.8	18.4
20°-30°	234.1	23.4
30°-40°	217.9	21.8
40°-50°	150.0	15.0
50°-60°	84.9	8.5
60°-70°	40.1	4.0
70°-80°	12.5	1.3
80°-90°	6.5	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°	488.8	48.8
0°-40°	706.7	70.6
0°-60°	941.6	94.1
0°-90°	1000.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1000.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	774	774	774	774	774	
5°	744	755	756	762	769	69
15°	597	617	650	699	728	166
25°	414	441	496	579	642	189
35°	223	254	329	442	529	138
45°	46	74	166	300	406	44
55°	13	15	36	173	282	12
65°	4	5	20	62	140	5
75°	3	8	11	12	17	4
85°	3	7	9	8	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	773.5	773.5	773.5	773.5	773.5
2.5°	764.9	772.7	767.5	768.4	769.2
5°	744.3	754.6	755.5	762.4	769.2
7.5°	714.2	727.1	736.6	752.9	764.1
10°	678.1	693.6	711.7	738.3	754.6
12.5°	639.5	657.5	682.4	720.3	743.5
15°	597.3	617.1	649.8	698.8	728.0
17.5°	552.7	575.0	614.5	673.0	709.9
20°	507.1	531.2	576.7	643.8	689.3
22.5°	461.5	486.5	537.2	612.0	667.0
25°	414.3	440.9	495.9	579.3	642.0
27.5°	366.1	393.6	454.7	545.8	615.4
30°	318.0	347.2	412.6	511.4	586.2
32.5°	270.7	300.0	371.3	477.0	557.8
35°	222.6	253.5	329.2	441.8	528.6
37.5°	174.5	208.0	287.9	405.7	498.5
40°	128.9	160.7	245.8	370.4	468.4
42.5°	85.9	116.9	208.0	335.2	437.5
45°	46.4	73.9	165.9	300.0	406.5
47.5°	24.9	39.5	129.8	265.6	376.5
50°	19.8	22.3	94.5	233.8	348.1
52.5°	16.3	18.0	61.9	203.7	315.4
55°	12.9	14.6	36.1	172.8	281.9
57.5°	10.3	12.0	23.2	143.5	249.3
60°	7.7	9.5	22.3	115.2	213.2
62.5°	6.0	6.9	20.6	88.5	175.3
65°	4.3	5.2	19.8	61.9	140.1
67.5°	3.4	4.3	18.0	39.5	104.9
70°	3.4	3.4	14.6	25.8	71.3
72.5°	3.4	6.0	12.9	17.2	43.0
75°	3.4	7.7	11.2	12.0	17.2
77.5°	3.4	8.6	9.5	9.5	9.5
80°	3.4	7.7	8.6	8.6	7.7
82.5°	3.4	6.9	7.7	8.6	6.9
85°	2.6	6.9	8.6	7.7	6.0
87.5°	2.6	6.9	7.7	6.9	4.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)