

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: P1061826

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061826
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-83)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-S850D940-X4F0-XX-UDD-SVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

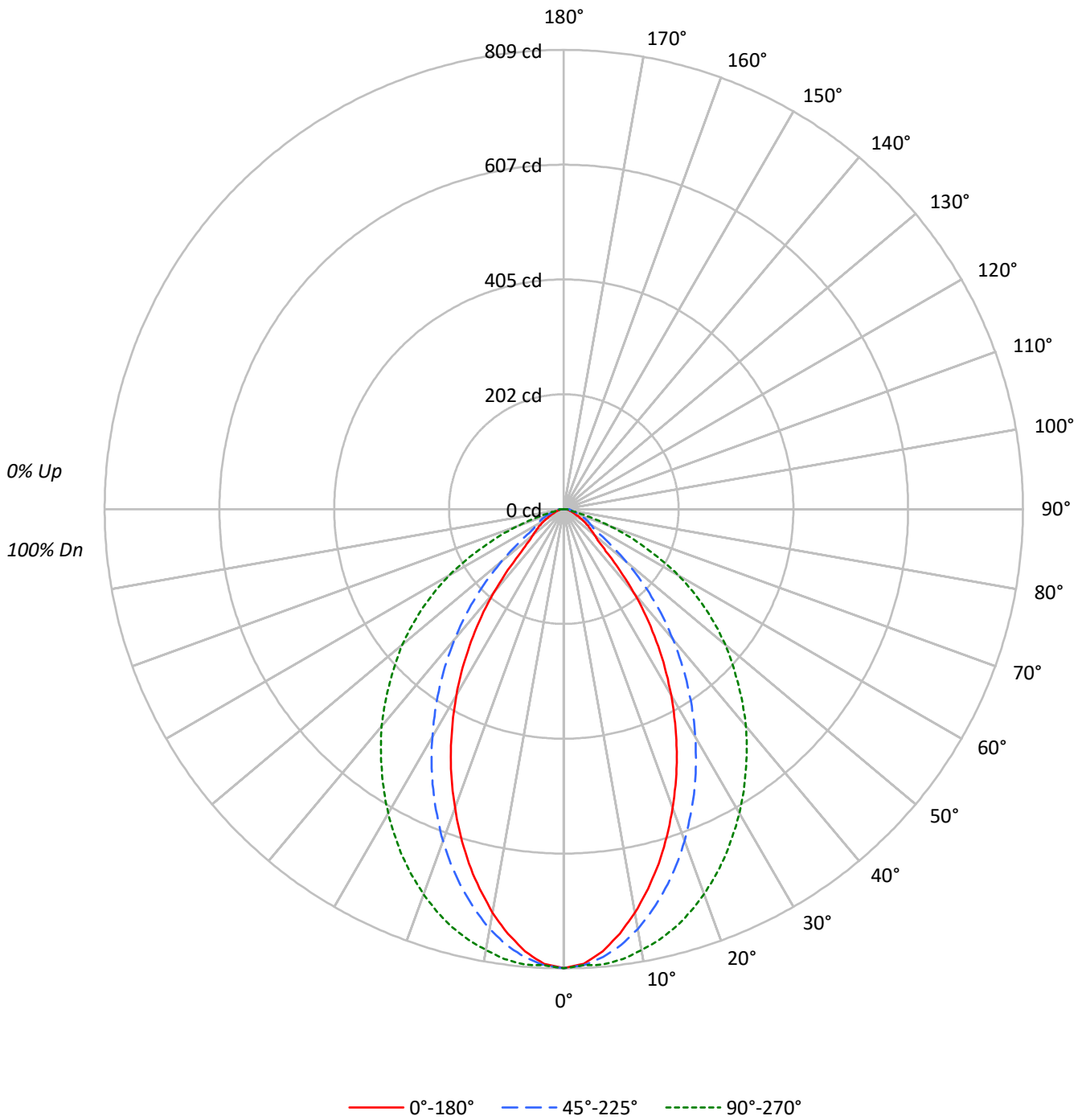
Lumens per Lamp: N/A
Luminaire Lumens: 1171.3 lumens
Efficiency: N/A
Efficacy: 45.4 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	108	104	101	109	105	103	100	101	99	97	98	96	94	94	92	91	89				89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79				79
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70				70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62				62
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	66	62	58	56				56
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	53	51				51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46				46
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42				42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	40	39				39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	46	41	37	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5568	5568	5568
5°	5405	5476	5565
10°	5047	5251	5516
15°	4606	4931	5434
20°	4105	4559	5289
25°	3577	4139	5118
30°	3006	3683	4919
35°	2390	3200	4702
40°	1722	2688	4488
45°	1020	2133	4226
50°	755	1519	3976
55°	640	939	3642
60°	521	757	3207
65°	406	701	2533
70°	346	606	1695
75°	319	527	686
80°	341	543	476
85°	411	814	545

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4226 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.5	6.4
10°-20°	195.7	16.7
20°-30°	255.8	21.8
30°-40°	249.2	21.3
40°-50°	186.9	16.0
50°-60°	117.2	10.0
60°-70°	61.0	5.2
70°-80°	22.1	1.9
80°-90°	8.8	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°	526.1	44.9
0°-40°	775.3	66.2
0°-60°	1079.5	92.2
0°-90°	1171.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1171.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	809	809	809	809	809	
5°	782	792	792	798	805	73
15°	646	665	692	735	762	180
25°	471	497	545	619	674	215
35°	284	314	381	482	559	177
45°	105	136	219	339	434	88
55°	53	56	78	204	303	48
65°	25	27	43	82	156	26
75°	12	16	20	21	26	13
85°	5	9	10	10	7	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	808.7	808.7	808.7	808.7	808.7
2.5°	801.8	809.5	804.4	804.4	804.4
5°	782.0	792.3	792.3	798.3	805.2
7.5°	754.5	766.5	774.3	788.9	799.2
10°	721.9	736.5	751.1	775.1	788.9
12.5°	684.9	702.1	722.7	756.2	776.9
15°	646.2	665.1	691.8	734.8	762.3
17.5°	604.1	626.5	658.3	709.8	743.3
20°	560.3	582.6	622.2	680.6	721.9
22.5°	516.5	540.5	583.5	649.7	698.7
25°	470.9	496.7	544.8	618.7	673.7
27.5°	424.5	451.2	504.4	586.9	646.2
30°	378.1	405.6	463.2	552.6	618.7
32.5°	331.7	360.9	421.9	517.3	589.5
35°	284.4	314.5	380.7	482.1	559.4
37.5°	238.9	269.0	339.4	446.0	529.4
40°	191.6	224.3	299.1	409.9	499.3
42.5°	145.2	178.7	258.7	373.8	466.6
45°	104.8	135.8	219.1	338.6	434.0
47.5°	80.8	98.0	178.7	302.5	402.2
50°	70.5	75.6	141.8	269.0	371.2
52.5°	61.0	64.5	106.6	238.0	337.7
55°	53.3	55.9	78.2	204.5	303.4
57.5°	44.7	48.1	61.9	171.9	268.1
60°	37.8	39.5	55.0	141.8	232.9
62.5°	30.9	32.7	49.0	111.7	193.4
65°	24.9	26.6	43.0	82.5	155.5
67.5°	20.6	21.5	36.1	58.4	119.5
70°	17.2	18.0	30.1	40.4	84.2
72.5°	14.6	17.2	24.1	29.2	53.3
75°	12.0	16.3	19.8	20.6	25.8
77.5°	10.3	15.5	16.3	16.3	14.6
80°	8.6	12.9	13.7	12.9	12.0
82.5°	6.9	10.3	11.2	11.2	9.5
85°	5.2	8.6	10.3	9.5	6.9
87.5°	3.4	7.7	8.6	7.7	5.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)