

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: P1061778

Luminaire Tested: S125RDR-S850D840-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061778
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-S850D840-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, 80 CRI LEDS
Ballast/Driver: -

Summary

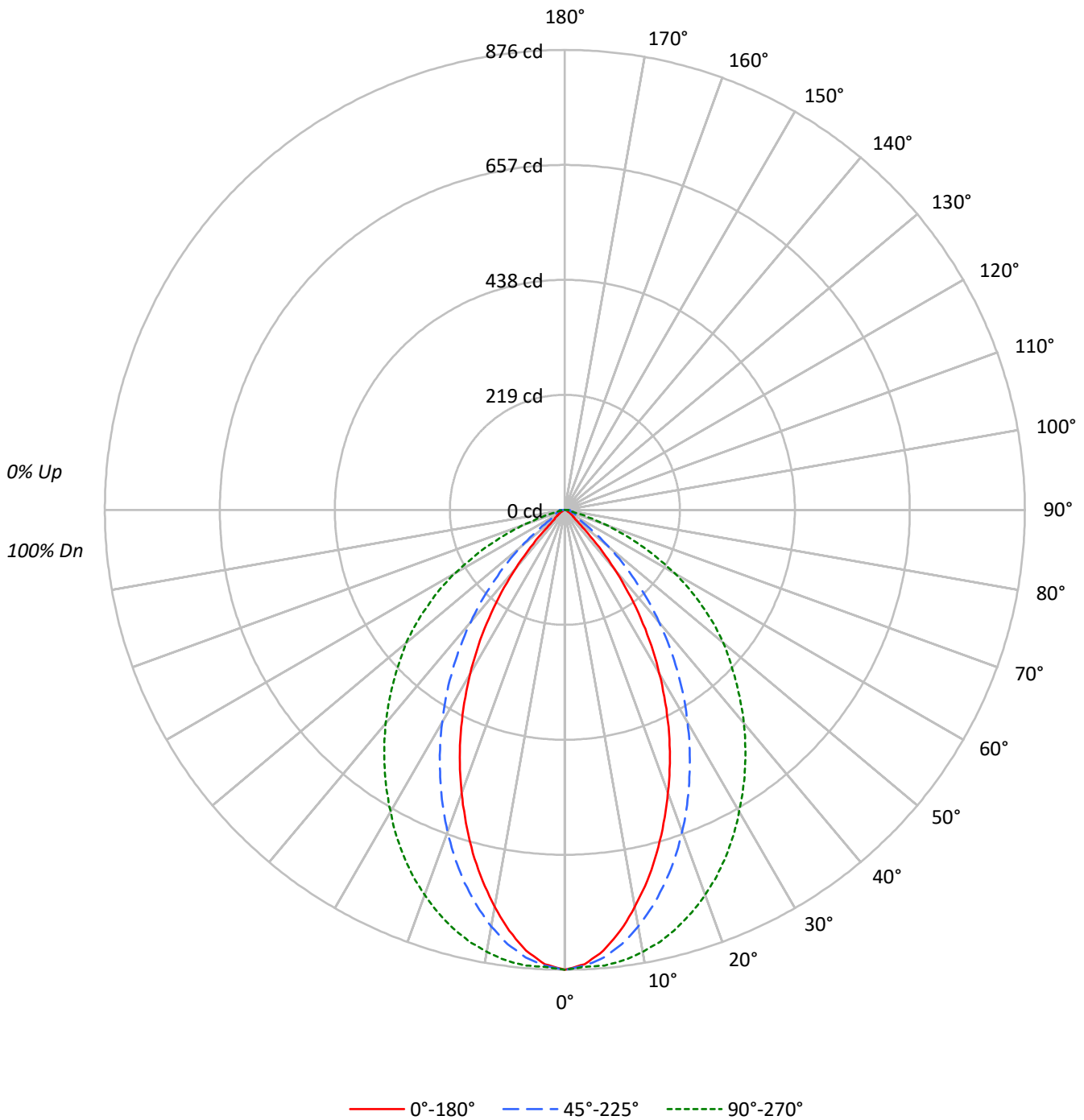
Lumens per Lamp: N/A
Luminaire Lumens: 1133.4 lumens
Efficiency: N/A
Efficacy: 43.9 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90			90	
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80			80	
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72			72	
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65			65	
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59			59	
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53			53	
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49			49	
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45			45	
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41			41	
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38			38	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6031	6031	6031
5°	5826	5914	6021
10°	5369	5635	5975
15°	4822	5246	5876
20°	4208	4785	5720
25°	3565	4266	5524
30°	2863	3714	5277
35°	2119	3134	5031
40°	1312	2502	4768
45°	512	1830	4483
50°	240	1147	4222
55°	175	491	3833
60°	121	348	3324
65°	80	365	2586
70°	79	332	1627
75°	104	338	519
80°	155	385	349
85°	229	766	537

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4483 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.3	7.1
10°-20°	208.2	18.4
20°-30°	265.1	23.4
30°-40°	246.8	21.8
40°-50°	169.9	15.0
50°-60°	96.2	8.5
60°-70°	45.4	4.0
70°-80°	14.2	1.3
80°-90°	7.4	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°	553.6	48.8
0°-40°	800.4	70.6
0°-60°	1066.4	94.1
0°-90°	1133.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1133.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	876	876	876	876	876	
5°	843	855	856	863	871	78
15°	676	699	736	791	824	188
25°	469	499	562	656	727	214
35°	252	287	373	500	599	156
45°	53	84	188	340	460	49
55°	15	16	41	196	319	13
65°	5	6	22	70	159	5
75°	4	9	13	14	20	4
85°	3	8	10	9	7	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	876.0	876.0	876.0	876.0	876.0
2.5°	866.3	875.1	869.2	870.2	871.2
5°	842.9	854.6	855.6	863.4	871.2
7.5°	808.9	823.5	834.2	852.7	865.3
10°	768.0	785.5	806.0	836.1	854.6
12.5°	724.2	744.6	772.9	815.7	842.0
15°	676.5	698.9	735.9	791.4	824.4
17.5°	625.9	651.2	696.0	762.2	804.0
20°	574.3	601.5	653.1	729.1	780.6
22.5°	522.7	550.9	608.4	693.0	755.3
25°	469.2	499.3	561.6	656.1	727.1
27.5°	414.7	445.8	514.9	618.1	696.9
30°	360.1	393.2	467.2	579.2	663.8
32.5°	306.6	339.7	420.5	540.2	631.7
35°	252.1	287.1	372.8	500.3	598.6
37.5°	197.6	235.6	326.1	459.4	564.6
40°	146.0	182.0	278.4	419.5	530.5
42.5°	97.3	132.4	235.6	379.6	495.4
45°	52.6	83.7	187.9	339.7	460.4
47.5°	28.2	44.8	147.0	300.8	426.3
50°	22.4	25.3	107.1	264.8	394.2
52.5°	18.5	20.4	70.1	230.7	357.2
55°	14.6	16.5	40.9	195.6	319.3
57.5°	11.7	13.6	26.3	162.6	282.3
60°	8.8	10.7	25.3	130.4	241.4
62.5°	6.8	7.8	23.4	100.3	198.6
65°	4.9	5.8	22.4	70.1	158.7
67.5°	3.9	4.9	20.4	44.8	118.8
70°	3.9	3.9	16.5	29.2	80.8
72.5°	3.9	6.8	14.6	19.5	48.7
75°	3.9	8.8	12.7	13.6	19.5
77.5°	3.9	9.7	10.7	10.7	10.7
80°	3.9	8.8	9.7	9.7	8.8
82.5°	3.9	7.8	8.8	9.7	7.8
85°	2.9	7.8	9.7	8.8	6.8
87.5°	2.9	7.8	8.8	7.8	4.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)