

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: P1175435

Luminaire Tested: S125RDR-H850D940-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2019
Report Number: P1175435
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-H850D940-X4F0-XX-UDD-WVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

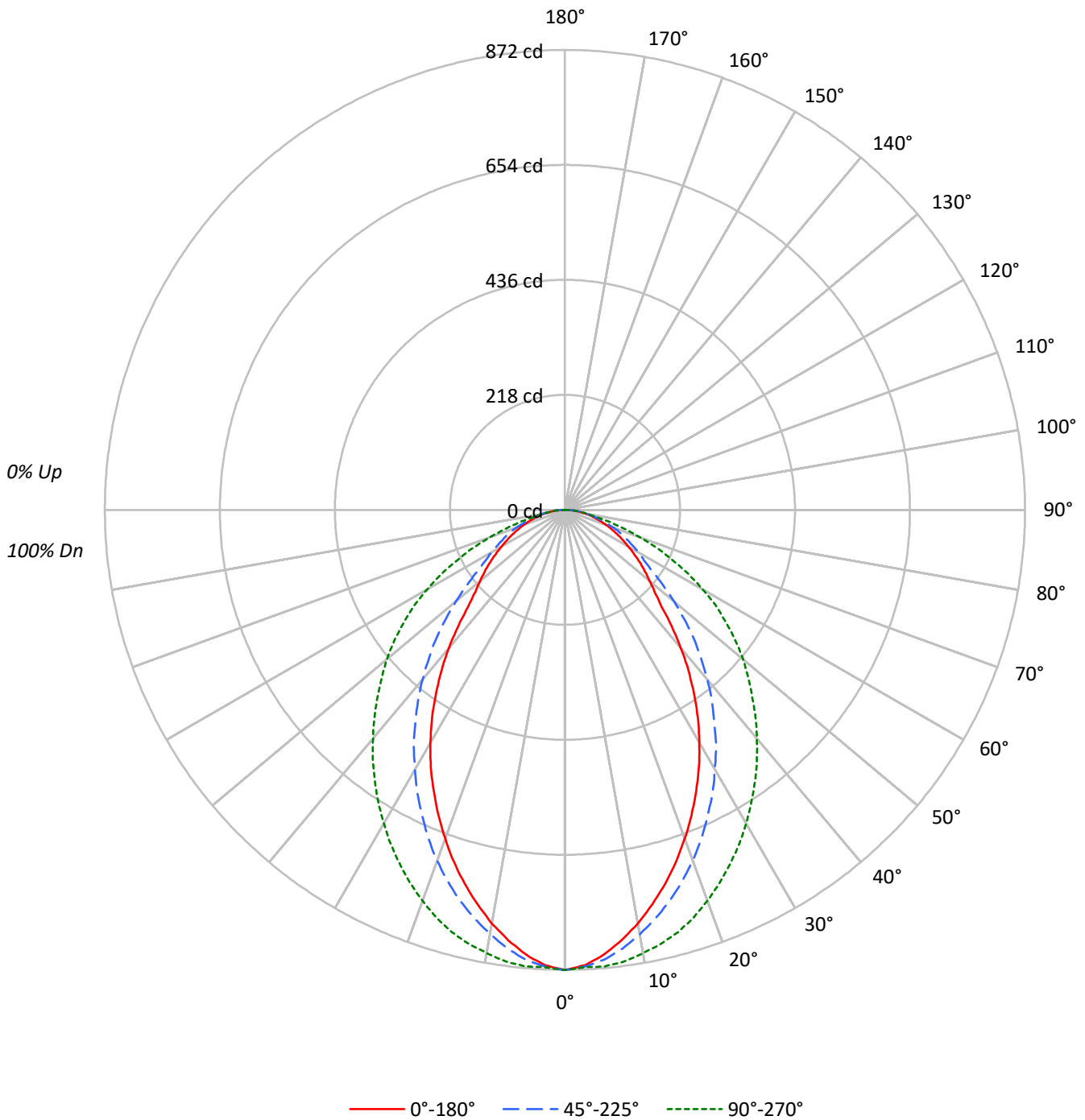
Lumens per Lamp: N/A
Luminaire Lumens: 1643.7 lumens
Efficiency: N/A
Efficacy: 69.9 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
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

TEST NUMBER: P1175435

CATALOG NUMBER: S125RDR-H850D940-X4F0-XX-UDD-WVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1175435

CATALOG NUMBER: S125RDR-H850D940-X4F0-XX-UDD-WVL-W

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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86				86
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74				74
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64				64
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56				56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50				50
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44				44
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40				40
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36				36
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33				33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30				30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6007	6007	6007
5°	5851	5918	6005
10°	5567	5711	5965
15°	5232	5469	5908
20°	4862	5188	5780
25°	4468	4861	5627
30°	4052	4517	5459
35°	3586	4152	5279
40°	3076	3774	5086
45°	2524	3360	4890
50°	2245	2888	4721
55°	2072	2419	4481
60°	1907	2203	4150
65°	1774	2076	3669
70°	1655	1939	2998
75°	1556	1793	2245
80°	1467	1645	1614
85°	1343	1635	1343

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4890 cd/sqm



TEST NUMBER: P1175435

CATALOG NUMBER: S125RDR-H850D940-X4F0-XX-UDD-WVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.8	4.9
10°-20°	217.7	13.2
20°-30°	299.5	18.2
30°-40°	317.7	19.3
40°-50°	278.0	16.9
50°-60°	213.4	13.0
60°-70°	142.1	8.6
70°-80°	72.9	4.4
80°-90°	21.6	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°	598.0	36.4
0°-40°	915.7	55.7
0°-60°	1407.1	85.6
0°-90°	1643.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1643.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	872	872	872	872	872	
5°	847	858	856	862	869	79
15°	734	751	767	804	829	206
25°	588	608	640	694	741	270
35°	427	447	494	567	628	266
45°	259	281	345	431	502	205
55°	173	176	202	299	373	155
65°	109	110	127	167	225	108
75°	58	62	67	71	84	62
85°	17	19	21	20	17	19
90°	0	0	0	0	0	



TEST NUMBER: P1175435

CATALOG NUMBER: S125RDR-H850D940-X4F0-XX-UDD-WVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	872.5	872.5	872.5	872.5	872.5
2.5°	864.3	873.2	866.6	867.3	868.0
5°	846.6	857.7	856.2	862.1	868.8
7.5°	822.9	834.7	838.4	853.2	863.6
10°	796.2	809.5	816.9	839.2	853.2
12.5°	765.8	781.4	793.2	822.1	842.9
15°	734.0	751.0	767.3	803.6	828.8
17.5°	699.9	717.0	738.4	779.9	810.3
20°	663.6	682.1	708.1	752.5	788.8
22.5°	626.6	645.8	675.5	724.4	765.8
25°	588.1	608.1	639.9	694.0	740.7
27.5°	550.3	568.8	605.9	663.6	714.7
30°	509.6	528.8	568.1	631.8	686.6
32.5°	468.8	488.1	533.3	599.9	657.7
35°	426.6	446.6	494.0	566.6	628.1
37.5°	384.4	405.1	457.7	532.5	597.7
40°	342.2	364.4	419.9	498.5	565.9
42.5°	299.2	322.9	381.4	465.1	534.8
45°	259.2	280.7	345.1	431.1	502.2
47.5°	230.3	242.9	306.6	396.2	471.1
50°	209.6	215.5	269.6	362.9	440.7
52.5°	191.1	194.8	233.3	331.8	407.4
55°	172.6	176.3	201.5	299.2	373.3
57.5°	154.8	157.0	177.8	266.6	339.2
60°	138.5	140.0	160.0	234.0	301.4
62.5°	123.7	124.4	142.9	200.7	263.7
65°	108.9	109.6	127.4	167.4	225.2
67.5°	95.5	95.5	112.6	137.0	188.1
70°	82.2	82.2	96.3	111.1	148.9
72.5°	70.4	71.8	81.5	89.6	116.3
75°	58.5	62.2	67.4	71.1	84.4
77.5°	47.4	51.8	54.1	55.5	56.3
80°	37.0	40.0	41.5	42.2	40.7
82.5°	27.4	29.6	30.4	30.4	28.1
85°	17.0	19.3	20.7	20.0	17.0
87.5°	8.1	11.1	11.9	10.4	8.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)