

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: P1061760

Luminaire Tested: S125RDR-S850D830-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061760
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-S850D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

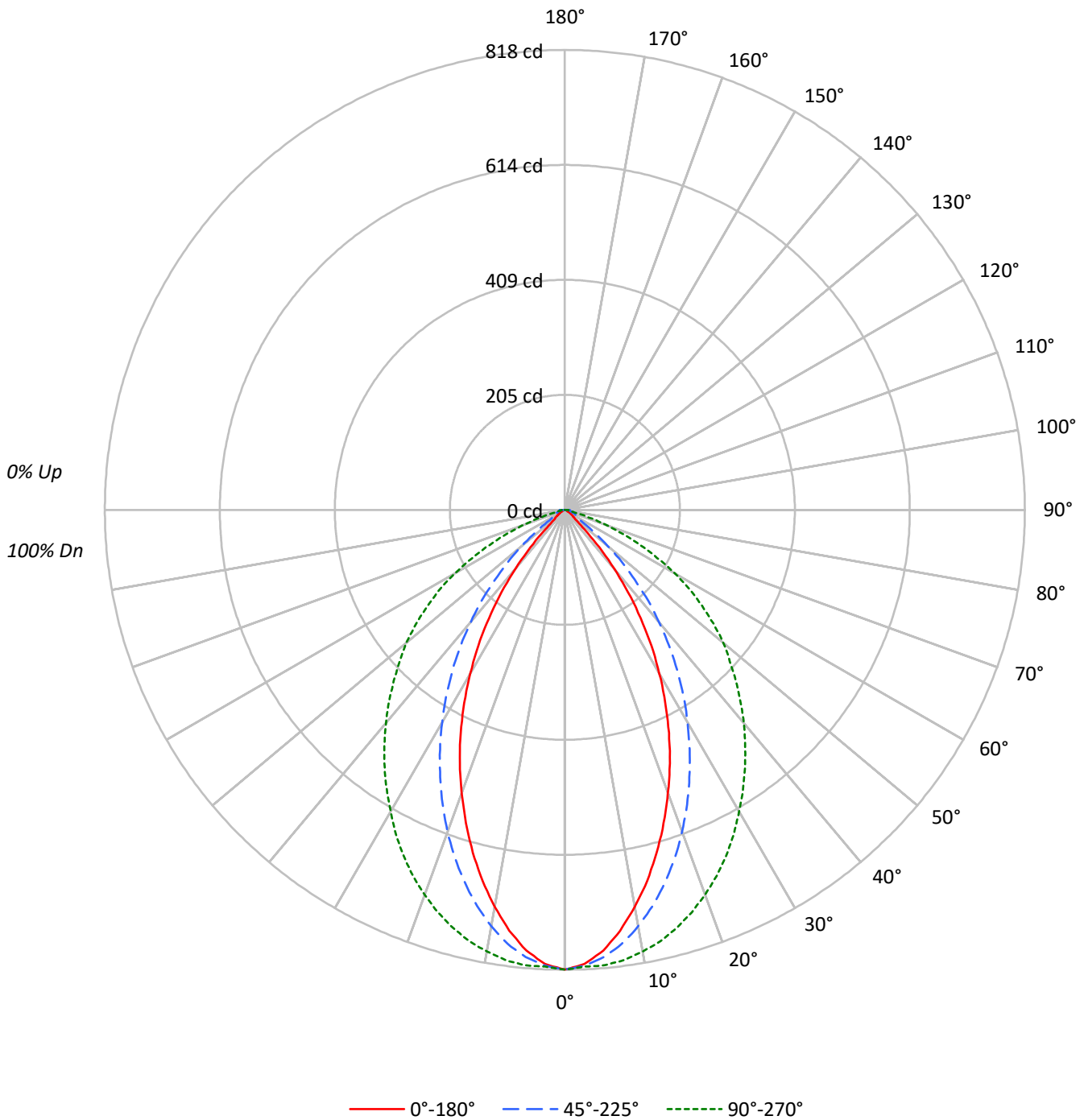
Lumens per Lamp: N/A
Luminaire Lumens: 1057.9 lumens
Efficiency: N/A
Efficacy: 41.0 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1061760

CATALOG NUMBER: S125RDR-S850D830-X4F0-XX-UDD-BVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1061760

CATALOG NUMBER: S125RDR-S850D830-X4F0-XX-UDD-BVL-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	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°	5629	5629	5629
5°	5437	5520	5620
10°	5011	5259	5576
15°	4501	4896	5485
20°	3927	4467	5339
25°	3327	3982	5155
30°	2672	3467	4926
35°	1978	2924	4696
40°	1225	2335	4450
45°	478	1707	4184
50°	224	1070	3941
55°	163	459	3577
60°	113	325	3102
65°	73	340	2413
70°	72	310	1518
75°	96	314	484
80°	143	361	325
85°	213	719	506

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4184 cd/sqm



TEST NUMBER: P1061760

CATALOG NUMBER: S125RDR-S850D830-X4F0-XX-UDD-BVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.0	7.1
10°-20°	194.3	18.4
20°-30°	247.4	23.4
30°-40°	230.3	21.8
40°-50°	158.5	15.0
50°-60°	89.7	8.5
60°-70°	42.4	4.0
70°-80°	13.3	1.3
80°-90°	6.9	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°	516.7	48.8
0°-40°	747.0	70.6
0°-60°	995.3	94.1
0°-90°	1057.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1057.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	818	818	818	818	818	
5°	787	798	799	806	813	73
15°	631	652	687	739	770	176
25°	438	466	524	612	679	200
35°	235	268	348	467	559	145
45°	49	78	175	317	430	46
55°	14	15	38	183	298	13
65°	4	6	21	65	148	5
75°	4	8	12	13	18	4
85°	3	7	9	8	6	3
90°	0	0	0	0	0	



TEST NUMBER: P1061760

CATALOG NUMBER: S125RDR-S850D830-X4F0-XX-UDD-BVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	817.6	817.6	817.6	817.6	817.6
2.5°	808.5	816.7	811.3	812.2	813.1
5°	786.7	797.6	798.6	805.8	813.1
7.5°	754.9	768.6	778.6	795.8	807.6
10°	716.8	733.1	752.2	780.4	797.6
12.5°	675.9	695.0	721.3	761.3	785.8
15°	631.4	652.3	686.8	738.6	769.5
17.5°	584.2	607.8	649.6	711.3	750.4
20°	536.0	561.4	609.6	680.5	728.6
22.5°	487.9	514.2	567.8	646.8	705.0
25°	437.9	466.1	524.2	612.3	678.6
27.5°	387.0	416.1	480.6	576.9	650.5
30°	336.1	367.0	436.1	540.5	619.6
32.5°	286.2	317.1	392.5	504.2	589.6
35°	235.3	268.0	347.9	467.0	558.7
37.5°	184.4	219.9	304.3	428.8	526.9
40°	136.3	169.9	259.8	391.6	495.1
42.5°	90.8	123.6	219.9	354.3	462.4
45°	49.1	78.1	175.3	317.1	429.7
47.5°	26.3	41.8	137.2	280.7	397.9
50°	20.9	23.6	99.9	247.1	367.9
52.5°	17.3	19.1	65.4	215.3	333.4
55°	13.6	15.4	38.2	182.6	298.0
57.5°	10.9	12.7	24.5	151.7	263.5
60°	8.2	10.0	23.6	121.7	225.3
62.5°	6.4	7.3	21.8	93.6	185.3
65°	4.5	5.5	20.9	65.4	148.1
67.5°	3.6	4.5	19.1	41.8	110.8
70°	3.6	3.6	15.4	27.3	75.4
72.5°	3.6	6.4	13.6	18.2	45.4
75°	3.6	8.2	11.8	12.7	18.2
77.5°	3.6	9.1	10.0	10.0	10.0
80°	3.6	8.2	9.1	9.1	8.2
82.5°	3.6	7.3	8.2	9.1	7.3
85°	2.7	7.3	9.1	8.2	6.4
87.5°	2.7	7.3	8.2	7.3	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)