

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: P1061503

Luminaire Tested: S125RDR-S1090D940-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061503
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-46)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-S1090D940-X4F0-XX-UDD-WVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

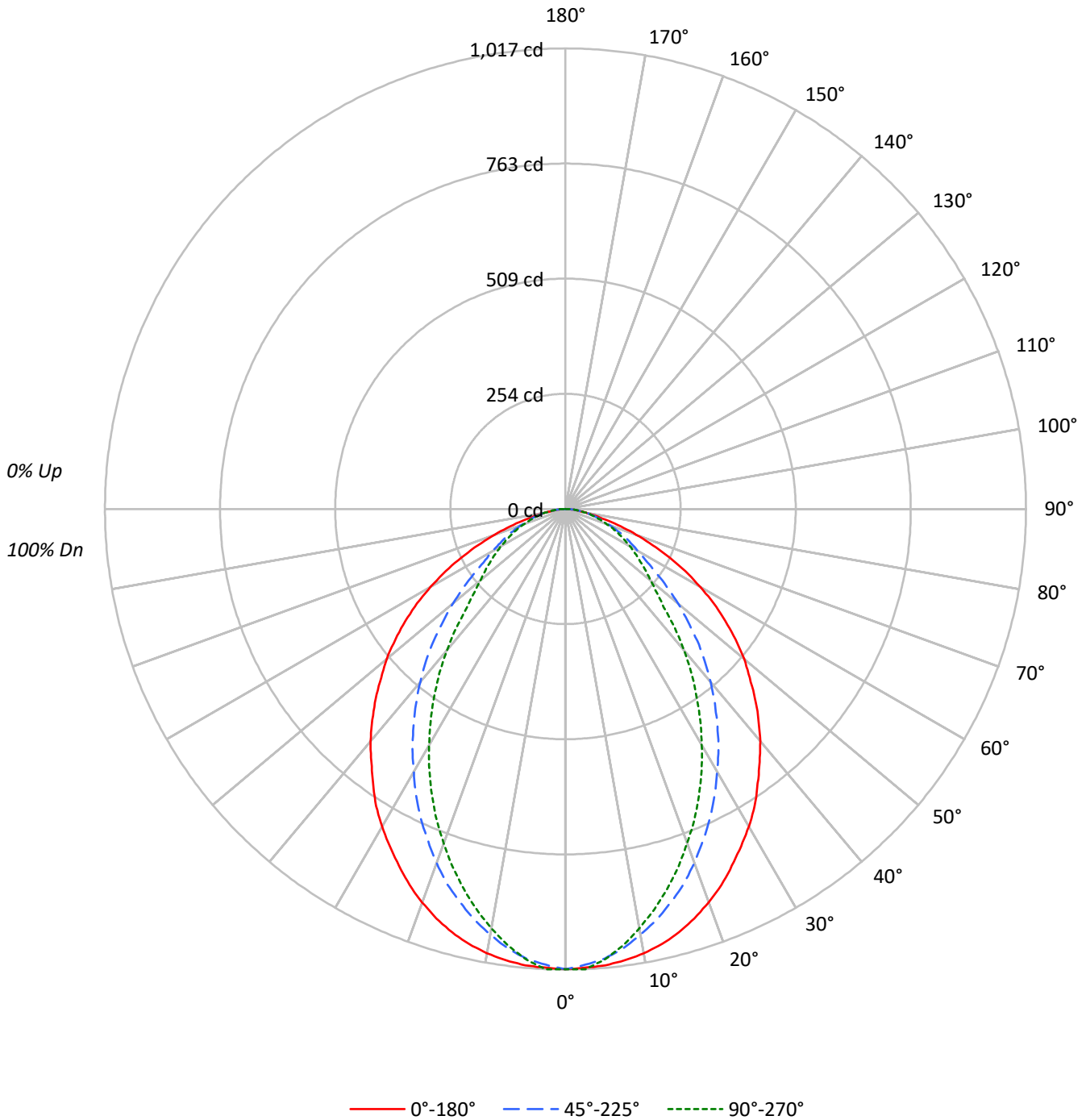
Lumens per Lamp: N/A
Luminaire Lumens: 1925.1 lumens
Efficiency: N/A
Efficacy: 55.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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: P1061503

CATALOG NUMBER: S125RDR-S1090D940-X4F0-XX-UDD-WVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1061503

CATALOG NUMBER: S125RDR-S1090D940-X4F0-XX-UDD-WVL-B

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	108	104	100	97	100	97	94	96	93	91	92	90	89	87				87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75				75
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65				65
4	86	76	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57				57
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50				50
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45				45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40				40
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36				36
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	33				33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30				30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6997	6997	6997
5°	6993	6886	6901
10°	6966	6673	6573
15°	6898	6410	6189
20°	6775	6095	5756
25°	6606	5733	5297
30°	6439	5324	4789
35°	6223	4915	4247
40°	6019	4482	3659
45°	5769	4008	2997
50°	5520	3475	2623
55°	5179	2900	2424
60°	4725	2538	2264
65°	4135	2318	2103
70°	3354	2088	1955
75°	2408	1907	1820
80°	1661	1705	1705
85°	1217	1485	1572

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5769 cd/sqm



TEST NUMBER: P1061503

CATALOG NUMBER: S125RDR-S1090D940-X4F0-XX-UDD-WVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.5	4.9
10°-20°	255.6	13.3
20°-30°	353.2	18.3
30°-40°	376.2	19.5
40°-50°	330.5	17.2
50°-60°	250.6	13.0
60°-70°	162.7	8.5
70°-80°	80.6	4.2
80°-90°	21.1	1.1
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°	703.3	36.5
0°-40°	1079.5	56.1
0°-60°	1660.6	86.3
0°-90°	1925.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1925.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1016	1016	1016	1016	1016	
5°	1012	1010	996	1000	998	96
15°	968	946	899	878	868	273
25°	870	822	755	716	697	401
35°	740	672	585	532	505	463
45°	592	510	412	338	308	457
55°	431	346	242	208	202	385
65°	254	189	142	131	129	251
75°	90	79	72	70	68	101
85°	15	18	19	19	20	19
90°	0	0	0	0	0	



TEST NUMBER: P1061503

CATALOG NUMBER: S125RDR-S1090D940-X4F0-XX-UDD-WVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1016.2	1016.2	1016.2	1016.2	1016.2
2.5°	1014.0	1016.2	1007.4	1015.1	1017.3
5°	1011.8	1009.6	996.3	999.6	998.5
7.5°	1005.2	1000.8	978.7	976.5	972.1
10°	996.3	985.3	954.4	946.7	940.1
12.5°	984.2	966.5	929.0	913.6	905.9
15°	967.7	945.6	899.2	878.3	868.3
17.5°	947.8	916.9	868.3	839.7	828.6
20°	924.6	888.2	831.9	798.8	785.6
22.5°	899.2	856.2	793.3	758.0	743.7
25°	869.5	822.0	754.7	716.1	697.3
27.5°	839.7	786.7	713.9	670.8	651.0
30°	809.9	749.2	669.7	623.4	602.4
32.5°	777.9	710.6	628.9	578.2	553.9
35°	740.4	671.9	584.8	531.8	505.3
37.5°	703.9	631.1	541.8	482.2	456.8
40°	669.7	592.5	498.7	433.6	407.1
42.5°	631.1	551.7	455.7	387.3	357.5
45°	592.5	509.8	411.6	337.6	307.8
47.5°	551.7	470.0	365.2	292.4	272.5
50°	515.3	429.2	324.4	258.2	244.9
52.5°	473.3	389.5	282.5	231.7	222.9
55°	431.4	346.5	241.6	208.5	201.9
57.5°	388.4	307.8	209.6	188.7	182.1
60°	343.1	268.1	184.3	167.7	164.4
62.5°	297.9	227.3	162.2	150.1	145.6
65°	253.8	188.7	142.3	131.3	129.1
67.5°	208.5	153.4	122.5	114.7	113.6
70°	166.6	124.7	103.7	99.3	97.1
72.5°	128.0	99.3	87.2	83.9	82.8
75°	90.5	79.4	71.7	69.5	68.4
77.5°	60.7	60.7	57.4	55.2	56.3
80°	41.9	44.1	43.0	43.0	43.0
82.5°	27.6	29.8	30.9	30.9	30.9
85°	15.4	17.7	18.8	18.8	19.9
87.5°	5.5	6.6	7.7	8.8	8.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)