

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: P1061461

Luminaire Tested: S125RDR-S1090D850-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061461
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-48)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-S1090D850-X4F0-XX-UDD-BVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

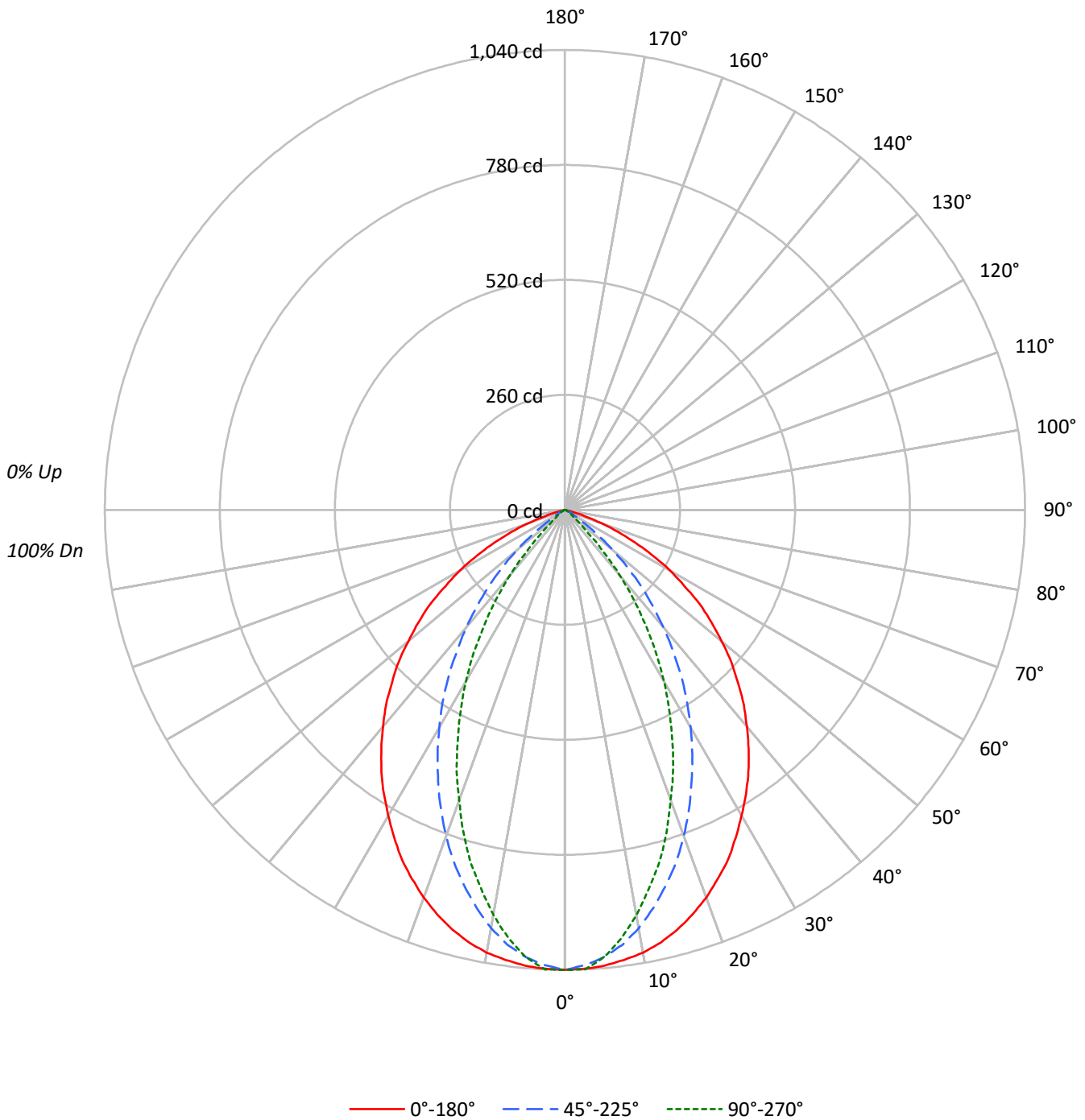
Lumens per Lamp: N/A
Luminaire Lumens: 1343.7 lumens
Efficiency: N/A
Efficacy: 38.4 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	57	67	61	57	66	61	57	65	60	56	54
7	76	65	58	53	74	64	57	52	63	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7161	7161	7161
5°	7151	7018	7018
10°	7109	6715	6504
15°	7003	6270	5879
20°	6837	5751	5117
25°	6630	5150	4358
30°	6349	4517	3556
35°	6078	3852	2664
40°	5747	3108	1727
45°	5385	2352	748
50°	4953	1500	280
55°	4464	659	198
60°	3779	284	132
65°	2861	179	67
70°	1739	83	28
75°	364	37	37
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5385 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.9	7.1
10°-20°	249.9	18.6
20°-30°	320.9	23.9
30°-40°	302.1	22.5
40°-50°	211.2	15.7
50°-60°	112.8	8.4
60°-70°	45.0	3.3
70°-80°	5.8	0.4
80°-90°	0.0	0.0
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°	666.7	49.6
0°-40°	968.8	72.1
0°-60°	1292.9	96.2
0°-90°	1343.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1343.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1040	1040	1040	1040	1040	
5°	1035	1032	1015	1018	1015	98
15°	982	951	880	838	825	276
25°	873	796	678	604	574	401
35°	723	608	458	354	317	451
45°	553	414	242	117	77	427
55°	372	228	55	19	16	330
65°	176	70	11	6	4	175
75°	14	4	1	1	1	27
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1040.1	1040.1	1040.1	1040.1	1040.1
2.5°	1038.7	1040.1	1030.5	1038.7	1040.1
5°	1034.6	1031.9	1015.4	1018.2	1015.4
7.5°	1026.4	1019.5	992.1	982.5	977.0
10°	1016.8	1001.7	960.5	939.9	930.3
12.5°	1001.7	979.7	922.1	890.5	876.8
15°	982.5	950.9	879.6	838.4	824.7
17.5°	959.2	918.0	835.7	784.9	764.3
20°	933.1	878.2	784.9	724.5	698.4
22.5°	902.9	839.8	732.7	665.5	639.4
25°	872.7	795.9	677.9	603.8	573.6
27.5°	835.7	750.6	623.0	543.4	510.5
30°	798.6	705.3	568.1	481.6	447.3
32.5°	761.6	657.3	513.2	417.1	382.8
35°	723.1	607.9	458.3	354.0	317.0
37.5°	682.0	558.5	399.3	293.6	255.2
40°	639.4	510.5	345.8	234.6	192.1
42.5°	598.3	462.4	292.3	177.0	130.4
45°	553.0	414.4	241.5	116.6	76.8
47.5°	510.5	367.7	189.4	67.2	39.8
50°	462.4	319.7	140.0	35.7	26.1
52.5°	417.1	273.1	93.3	23.3	20.6
55°	371.9	227.8	54.9	19.2	16.5
57.5°	319.7	183.9	30.2	15.1	12.3
60°	274.4	144.1	20.6	11.0	9.6
62.5°	222.3	105.7	15.1	8.2	6.9
65°	175.6	70.0	11.0	5.5	4.1
67.5°	130.4	41.2	6.9	2.7	2.7
70°	86.4	22.0	4.1	1.4	1.4
72.5°	45.3	9.6	2.7	1.4	1.4
75°	13.7	4.1	1.4	1.4	1.4
77.5°	0.0	1.4	0.0	0.0	1.4
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)