

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: P1061463

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061463
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-S1090D850-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: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

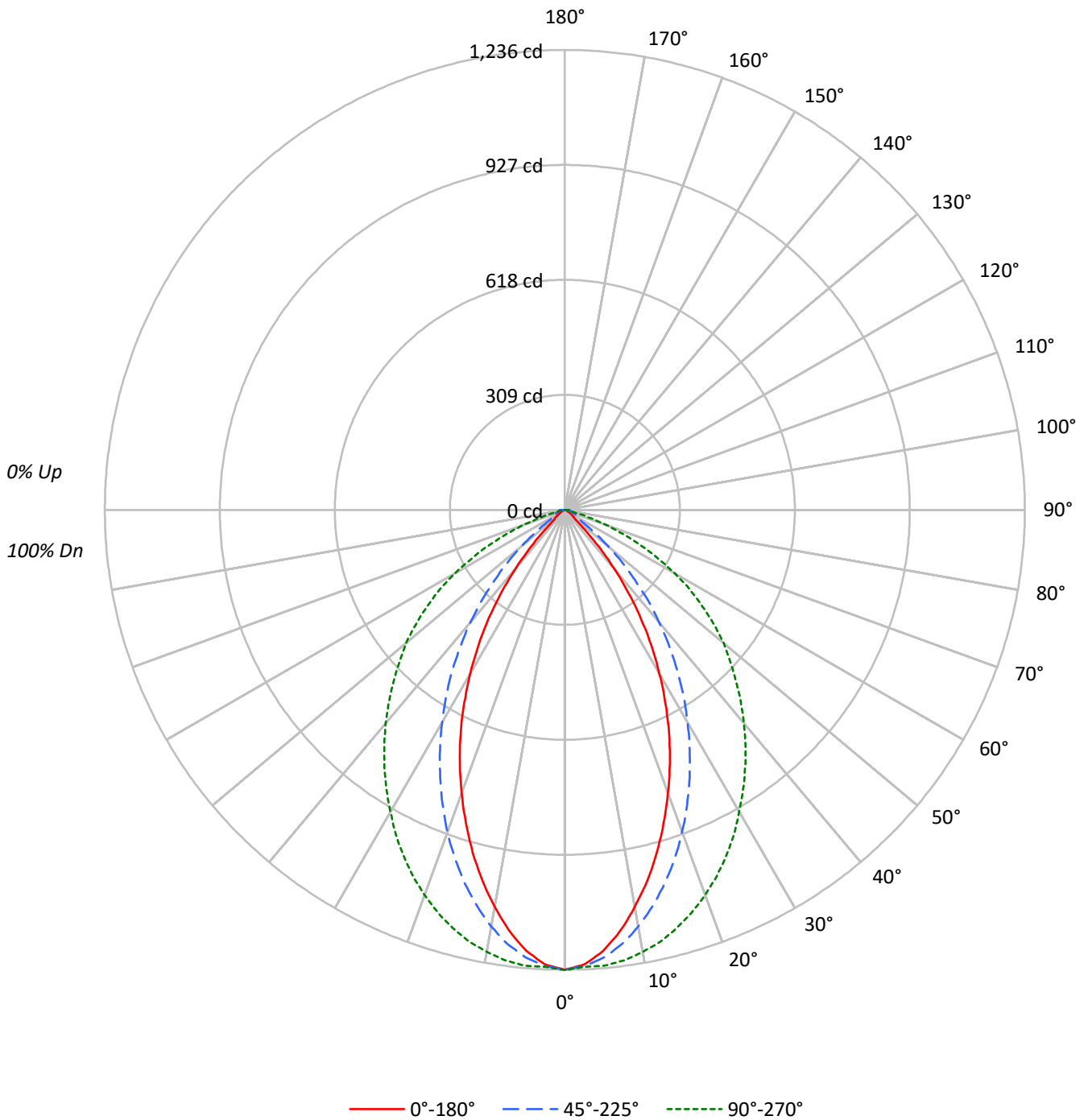
Lumens per Lamp: N/A
Luminaire Lumens: 1599.5 lumens
Efficiency: N/A
Efficacy: 45.7 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P1061463

CATALOG NUMBER: S125RDR-S1090D850-X4F0-XX-UDD-BVL-W

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8512	8512	8512
5°	8222	8345	8497
10°	7577	7952	8432
15°	6805	7403	8294
20°	5938	6753	8072
25°	5030	6021	7795
30°	4040	5242	7448
35°	2991	4422	7101
40°	1852	3531	6728
45°	723	2581	6326
50°	338	1619	5959
55°	247	693	5409
60°	171	492	4692
65°	112	515	3648
70°	111	471	2295
75°	146	476	732
80°	218	543	492
85°	324	1082	758

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6326 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.4	7.1
10°-20°	293.8	18.4
20°-30°	374.1	23.4
30°-40°	348.2	21.8
40°-50°	239.7	15.0
50°-60°	135.7	8.5
60°-70°	64.1	4.0
70°-80°	20.0	1.3
80°-90°	10.5	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°	781.3	48.8
0°-40°	1129.5	70.6
0°-60°	1504.9	94.1
0°-90°	1599.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1599.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1236	1236	1236	1236	1236	
5°	1190	1206	1207	1218	1229	110
15°	955	986	1038	1117	1164	266
25°	662	705	793	926	1026	302
35°	356	405	526	706	845	220
45°	74	118	265	479	650	70
55°	21	23	58	276	451	19
65°	7	8	32	99	224	8
75°	6	12	18	19	28	6
85°	4	11	14	12	10	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1236.3	1236.3	1236.3	1236.3	1236.3
2.5°	1222.5	1234.9	1226.7	1228.0	1229.4
5°	1189.6	1206.1	1207.4	1218.4	1229.4
7.5°	1141.5	1162.1	1177.2	1203.3	1221.2
10°	1083.8	1108.5	1137.4	1180.0	1206.1
12.5°	1022.0	1050.8	1090.7	1151.1	1188.2
15°	954.7	986.3	1038.5	1116.8	1163.5
17.5°	883.2	919.0	982.2	1075.6	1134.6
20°	810.4	848.9	921.7	1028.9	1101.7
22.5°	737.6	777.5	858.5	978.0	1065.9
25°	662.1	704.7	792.6	925.8	1026.1
27.5°	585.2	629.1	726.7	872.3	983.5
30°	508.2	554.9	659.3	817.3	936.8
32.5°	432.7	479.4	593.4	762.4	891.5
35°	355.8	405.2	526.1	706.0	844.8
37.5°	278.8	332.4	460.2	648.4	796.7
40°	206.0	256.9	392.9	592.0	748.6
42.5°	137.4	186.8	332.4	535.7	699.2
45°	74.2	118.1	265.1	479.4	649.7
47.5°	39.8	63.2	207.4	424.5	601.7
50°	31.6	35.7	151.1	373.6	556.3
52.5°	26.1	28.8	98.9	325.6	504.1
55°	20.6	23.4	57.7	276.1	450.6
57.5°	16.5	19.2	37.1	229.4	398.4
60°	12.4	15.1	35.7	184.1	340.7
62.5°	9.6	11.0	33.0	141.5	280.2
65°	6.9	8.2	31.6	98.9	223.9
67.5°	5.5	6.9	28.8	63.2	167.6
70°	5.5	5.5	23.4	41.2	114.0
72.5°	5.5	9.6	20.6	27.5	68.7
75°	5.5	12.4	17.9	19.2	27.5
77.5°	5.5	13.7	15.1	15.1	15.1
80°	5.5	12.4	13.7	13.7	12.4
82.5°	5.5	11.0	12.4	13.7	11.0
85°	4.1	11.0	13.7	12.4	9.6
87.5°	4.1	11.0	12.4	11.0	6.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)