

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: P1061453

Luminaire Tested: S125RDR-S1090D840-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061453  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-87)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-S1090D840-X4F0-XX-UDD-BVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

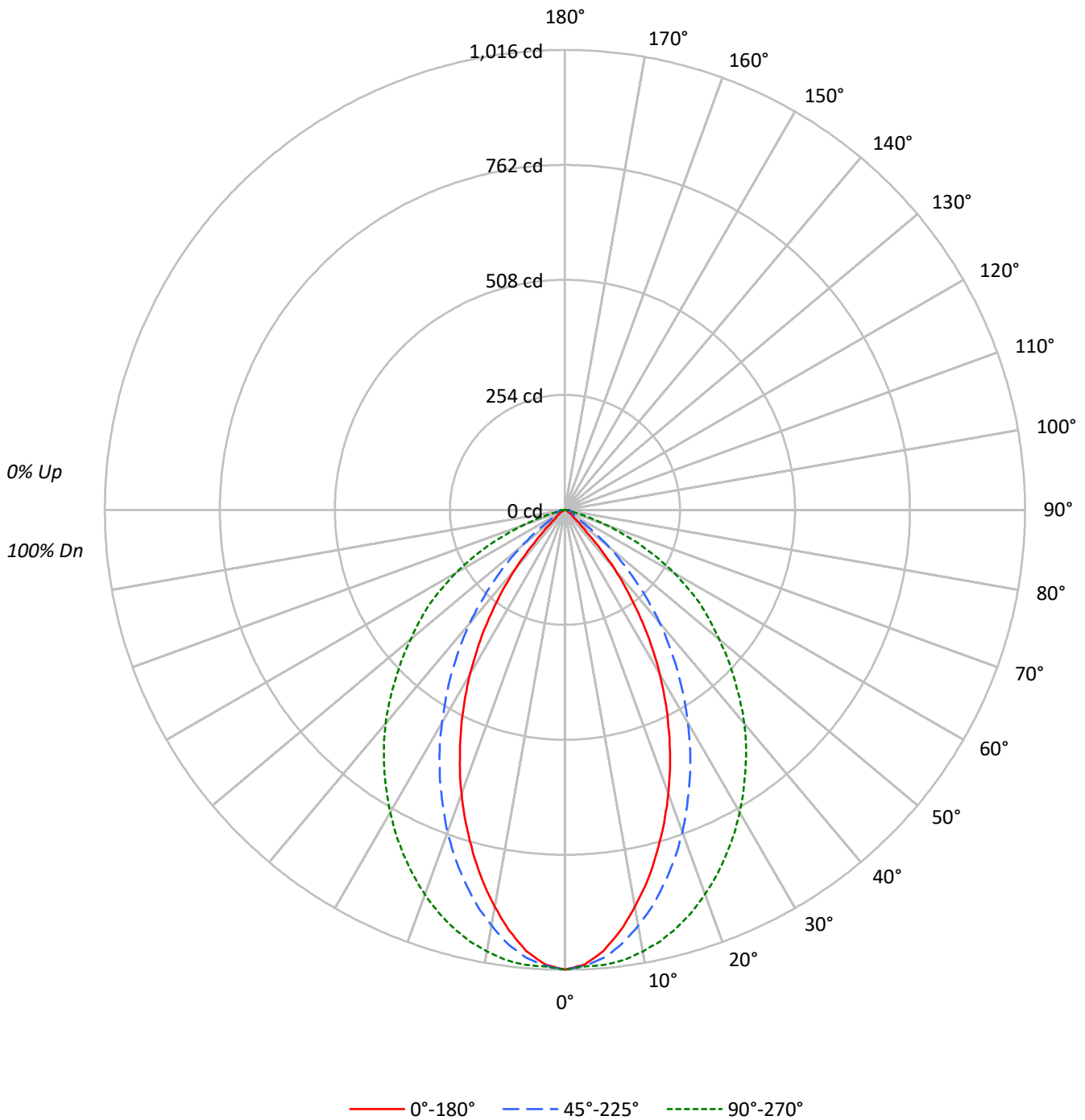
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1306.2 lumens  
Efficiency: N/A  
Efficacy: 37.3 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

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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	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	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81				81
3	98	90	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	68	74	70	67	65				65
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59				59
6	80	69	62	57	78	68	62	57	67	61	56	65	60	56	64	59	55	54				54
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49				49
8	71	60	52	47	69	59	52	47	58	52	47	57	51	47	55	50	47	45				45
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42				42
10	63	52	45	41	62	51	45	40	50	44	40	50	44	40	49	44	40	39				39

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	6992	6992	6992
5°	6759	6863	6976
10°	6226	6523	6925
15°	5590	6071	6811
20°	4894	5553	6625
25°	4133	4959	6394
30°	3331	4315	6135
35°	2449	3637	5845
40°	1529	2934	5542
45°	573	2143	5151
50°	268	1340	4756
55°	196	556	4398
60°	138	293	3806
65°	81	347	3016
70°	76	403	1914
75°	101	399	599
80°	151	496	448
85°	300	790	592

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5151 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.1	7.1
10°-20°	241.1	18.5
20°-30°	307.1	23.5
30°-40°	285.8	21.9
40°-50°	195.9	15.0
50°-60°	107.9	8.3
60°-70°	51.1	3.9
70°-80°	16.1	1.2
80°-90°	8.2	0.6
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°	641.3	49.1
0°-40°	927.2	71.0
0°-60°	1230.9	94.2
0°-90°	1306.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1306.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1016	1016	1016	1016	1016	
5°	978	990	993	1000	1009	91
15°	784	809	852	916	956	219
25°	544	578	653	758	842	248
35°	291	333	433	575	695	181
45°	59	99	220	390	529	56
55°	16	19	46	218	366	15
65°	5	6	21	80	185	6
75°	4	6	15	16	22	4
85°	4	9	10	9	8	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1015.5	1015.5	1015.5	1015.5	1015.5
2.5°	1005.5	1015.5	1008.0	1008.0	1009.3
5°	978.0	990.5	993.0	1000.5	1009.3
7.5°	938.0	954.3	966.8	988.0	1003.0
10°	890.5	910.5	933.0	968.0	990.5
12.5°	840.4	861.7	895.5	944.2	975.5
15°	784.2	809.2	851.7	915.5	955.5
17.5°	726.6	754.1	806.7	881.7	931.7
20°	667.9	696.6	757.9	841.7	904.2
22.5°	606.6	637.8	705.4	800.4	874.2
25°	544.0	577.8	652.8	757.9	841.7
27.5°	481.5	516.5	599.1	714.1	807.9
30°	419.0	455.2	542.8	669.1	771.7
32.5°	355.2	395.2	487.8	624.1	734.1
35°	291.4	332.7	432.7	575.3	695.4
37.5°	228.9	271.4	378.9	529.0	656.6
40°	170.1	212.6	326.4	482.8	616.6
42.5°	110.1	155.1	271.4	435.2	572.8
45°	58.8	98.8	220.1	390.2	529.0
47.5°	31.3	52.5	171.3	345.2	487.8
50°	25.0	28.8	125.1	300.2	444.0
52.5°	20.0	22.5	80.0	253.9	405.2
55°	16.3	18.8	46.3	217.6	366.4
57.5°	12.5	15.0	26.3	181.3	321.4
60°	10.0	11.3	21.3	145.1	276.4
62.5°	6.3	8.8	21.3	112.6	231.4
65°	5.0	6.3	21.3	80.0	185.1
67.5°	5.0	5.0	21.3	52.5	138.8
70°	3.8	3.8	20.0	33.8	95.1
72.5°	3.8	3.8	17.5	22.5	55.0
75°	3.8	6.3	15.0	16.3	22.5
77.5°	3.8	10.0	13.8	13.8	12.5
80°	3.8	10.0	12.5	11.3	11.3
82.5°	3.8	10.0	10.0	10.0	8.8
85°	3.8	8.8	10.0	8.8	7.5
87.5°	3.8	8.8	8.8	8.8	5.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)