

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: P1061512

Luminaire Tested: S125RDR-S1090D950-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061512  
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-S1090D950-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: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

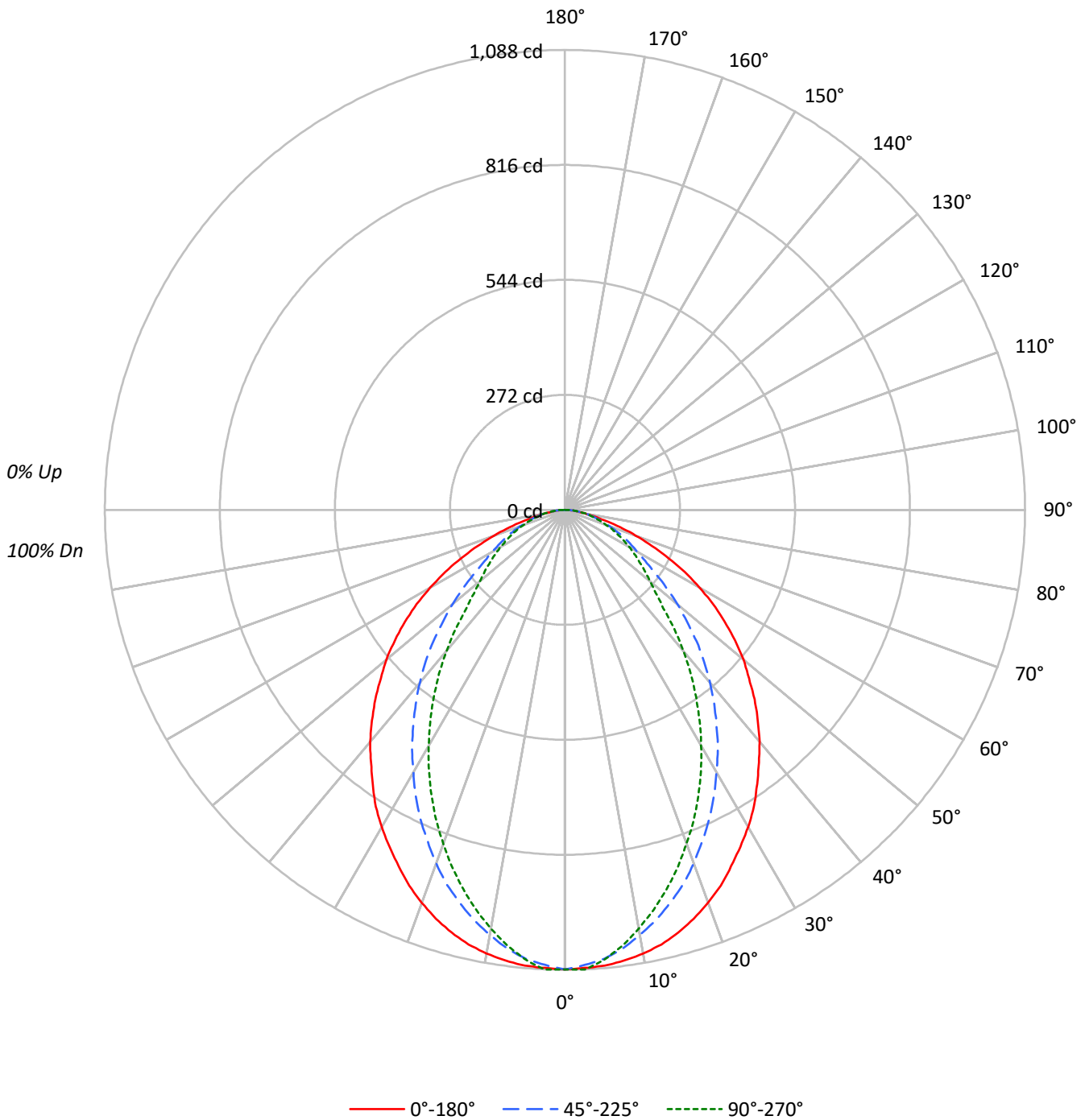
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2059.5 lumens  
Efficiency: N/A  
Efficacy: 58.8 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

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	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	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°	7486	7486	7486
5°	7482	7367	7384
10°	7452	7139	7031
15°	7379	6858	6622
20°	7248	6522	6158
25°	7067	6134	5667
30°	6888	5696	5124
35°	6658	5258	4544
40°	6440	4796	3915
45°	6172	4287	3206
50°	5905	3717	2807
55°	5541	3103	2593
60°	5055	2714	2422
65°	4423	2481	2250
70°	3587	2235	2092
75°	2575	2040	1947
80°	1780	1824	1824
85°	1303	1588	1675

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6172 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	101.1	4.9
10°-20°	273.4	13.3
20°-30°	377.9	18.3
30°-40°	402.5	19.5
40°-50°	353.6	17.2
50°-60°	268.1	13.0
60°-70°	174.1	8.5
70°-80°	86.3	4.2
80°-90°	22.6	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°	752.4	36.5
0°-40°	1154.9	56.1
0°-60°	1776.6	86.3
0°-90°	2059.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2059.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1087	1087	1087	1087	1087	
5°	1082	1080	1066	1070	1068	103
15°	1035	1012	962	940	929	292
25°	930	879	807	766	746	429
35°	792	719	626	569	541	496
45°	634	545	440	361	329	489
55°	462	371	258	223	216	412
65°	272	202	152	140	138	268
75°	97	85	77	74	73	108
85°	16	19	20	20	21	20
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1087.2	1087.2	1087.2	1087.2	1087.2
2.5°	1084.8	1087.2	1077.7	1086.0	1088.4
5°	1082.5	1080.1	1065.9	1069.5	1068.3
7.5°	1075.4	1070.7	1047.1	1044.7	1040.0
10°	1065.9	1054.1	1021.1	1012.8	1005.7
12.5°	1053.0	1034.1	993.9	977.4	969.1
15°	1035.2	1011.6	962.1	939.6	929.0
17.5°	1014.0	980.9	929.0	898.3	886.5
20°	989.2	950.3	890.1	854.6	840.5
22.5°	962.1	916.0	848.7	811.0	795.6
25°	930.2	879.4	807.4	766.1	746.0
27.5°	898.3	841.7	763.7	717.7	696.5
30°	866.4	801.5	716.5	666.9	644.5
32.5°	832.2	760.2	672.9	618.6	592.6
35°	792.1	718.9	625.6	569.0	540.6
37.5°	753.1	675.2	579.6	515.9	488.7
40°	716.5	633.9	533.6	463.9	435.6
42.5°	675.2	590.2	487.5	414.3	382.5
45°	633.9	545.4	440.3	361.2	329.3
47.5°	590.2	502.9	390.7	312.8	291.6
50°	551.3	459.2	347.0	276.2	262.1
52.5°	506.4	416.7	302.2	247.9	238.4
55°	461.6	370.7	258.5	223.1	216.0
57.5°	415.5	329.3	224.3	201.9	194.8
60°	367.1	286.8	197.1	179.4	175.9
62.5°	318.7	243.2	173.5	160.5	155.8
65°	271.5	201.9	152.3	140.5	138.1
67.5°	223.1	164.1	131.0	122.8	121.6
70°	178.2	133.4	111.0	106.2	103.9
72.5°	136.9	106.2	93.3	89.7	88.5
75°	96.8	85.0	76.7	74.4	73.2
77.5°	64.9	64.9	61.4	59.0	60.2
80°	44.9	47.2	46.0	46.0	46.0
82.5°	29.5	31.9	33.1	33.1	33.1
85°	16.5	18.9	20.1	20.1	21.2
87.5°	5.9	7.1	8.3	9.4	9.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)