

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: P1061498

Luminaire Tested: S125RDR-S1090D940-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061498  
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-S1090D940-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, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

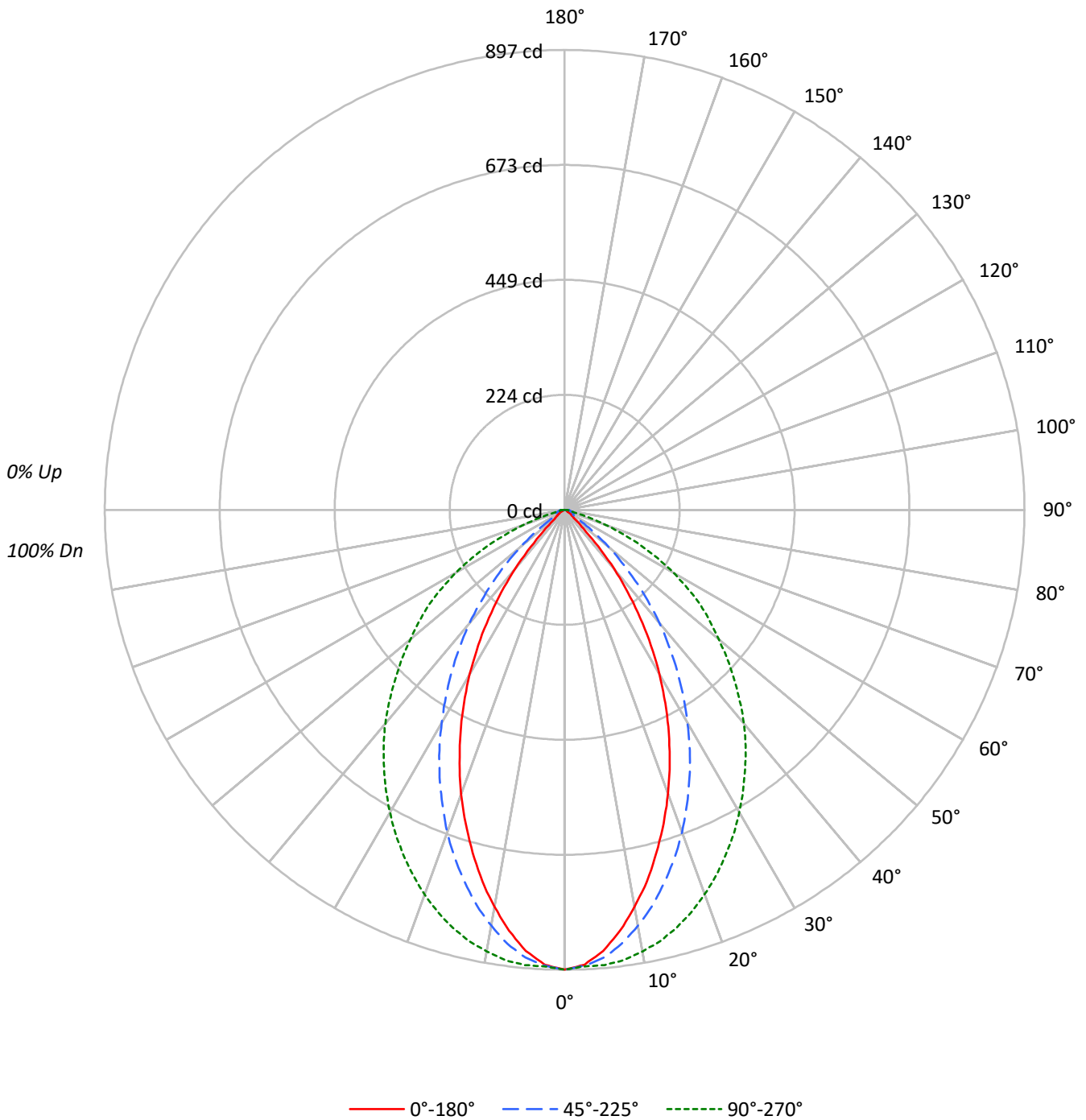
Lumens per Lamp: N/A  
Luminaire Lumens: 1153.3 lumens  
Efficiency: N/A  
Efficacy: 33.0 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct

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°	6174	6174	6174
5°	5969	6060	6160
10°	5497	5760	6115
15°	4936	5360	6014
20°	4321	4903	5850
25°	3650	4380	5646
30°	2942	3811	5417
35°	2163	3212	5161
40°	1350	2590	4893
45°	505	1893	4548
50°	237	1183	4199
55°	173	491	3885
60°	121	259	3361
65°	72	306	2662
70°	66	356	1689
75°	88	354	529
80°	131	436	393
85°	261	695	521

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4548 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.2	7.1
10°-20°	212.9	18.5
20°-30°	271.2	23.5
30°-40°	252.4	21.9
40°-50°	172.9	15.0
50°-60°	95.2	8.3
60°-70°	45.1	3.9
70°-80°	14.2	1.2
80°-90°	7.2	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°	566.3	49.1
0°-40°	818.7	71.0
0°-60°	1086.9	94.2
0°-90°	1153.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1153.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	897	897	897	897	897	
5°	864	875	877	884	891	80
15°	692	714	752	808	844	193
25°	480	510	576	669	743	219
35°	257	294	382	508	614	160
45°	52	87	194	345	467	49
55°	14	17	41	192	324	13
65°	4	6	19	71	163	5
75°	3	6	13	14	20	3
85°	3	8	9	8	7	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	896.7	896.7	896.7	896.7	896.7
2.5°	887.9	896.7	890.1	890.1	891.2
5°	863.6	874.6	876.8	883.5	891.2
7.5°	828.2	842.6	853.6	872.4	885.7
10°	786.3	804.0	823.8	854.8	874.6
12.5°	742.1	760.9	790.7	833.8	861.4
15°	692.4	714.5	752.0	808.4	843.7
17.5°	641.6	665.9	712.3	778.6	822.7
20°	589.7	615.1	669.2	743.2	798.4
22.5°	535.6	563.2	622.8	706.8	771.9
25°	480.4	510.2	576.5	669.2	743.2
27.5°	425.2	456.1	529.0	630.6	713.4
30°	370.0	402.0	479.3	590.8	681.4
32.5°	313.6	349.0	430.7	551.1	648.2
35°	257.3	293.8	382.1	508.0	614.0
37.5°	202.1	239.6	334.6	467.1	579.8
40°	150.2	187.7	288.2	426.3	544.4
42.5°	97.2	136.9	239.6	384.3	505.8
45°	51.9	87.2	194.4	344.6	467.1
47.5°	27.6	46.4	151.3	304.8	430.7
50°	22.1	25.4	110.4	265.0	392.0
52.5°	17.7	19.9	70.7	224.2	357.8
55°	14.4	16.6	40.9	192.2	323.6
57.5°	11.0	13.3	23.2	160.1	283.8
60°	8.8	9.9	18.8	128.1	244.1
62.5°	5.5	7.7	18.8	99.4	204.3
65°	4.4	5.5	18.8	70.7	163.4
67.5°	4.4	4.4	18.8	46.4	122.6
70°	3.3	3.3	17.7	29.8	83.9
72.5°	3.3	3.3	15.5	19.9	48.6
75°	3.3	5.5	13.3	14.4	19.9
77.5°	3.3	8.8	12.1	12.1	11.0
80°	3.3	8.8	11.0	9.9	9.9
82.5°	3.3	8.8	8.8	8.8	7.7
85°	3.3	7.7	8.8	7.7	6.6
87.5°	3.3	7.7	7.7	7.7	4.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)