

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: P1061443

Luminaire Tested: S125RDR-S1090D835-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061443  
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-S1090D835-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: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

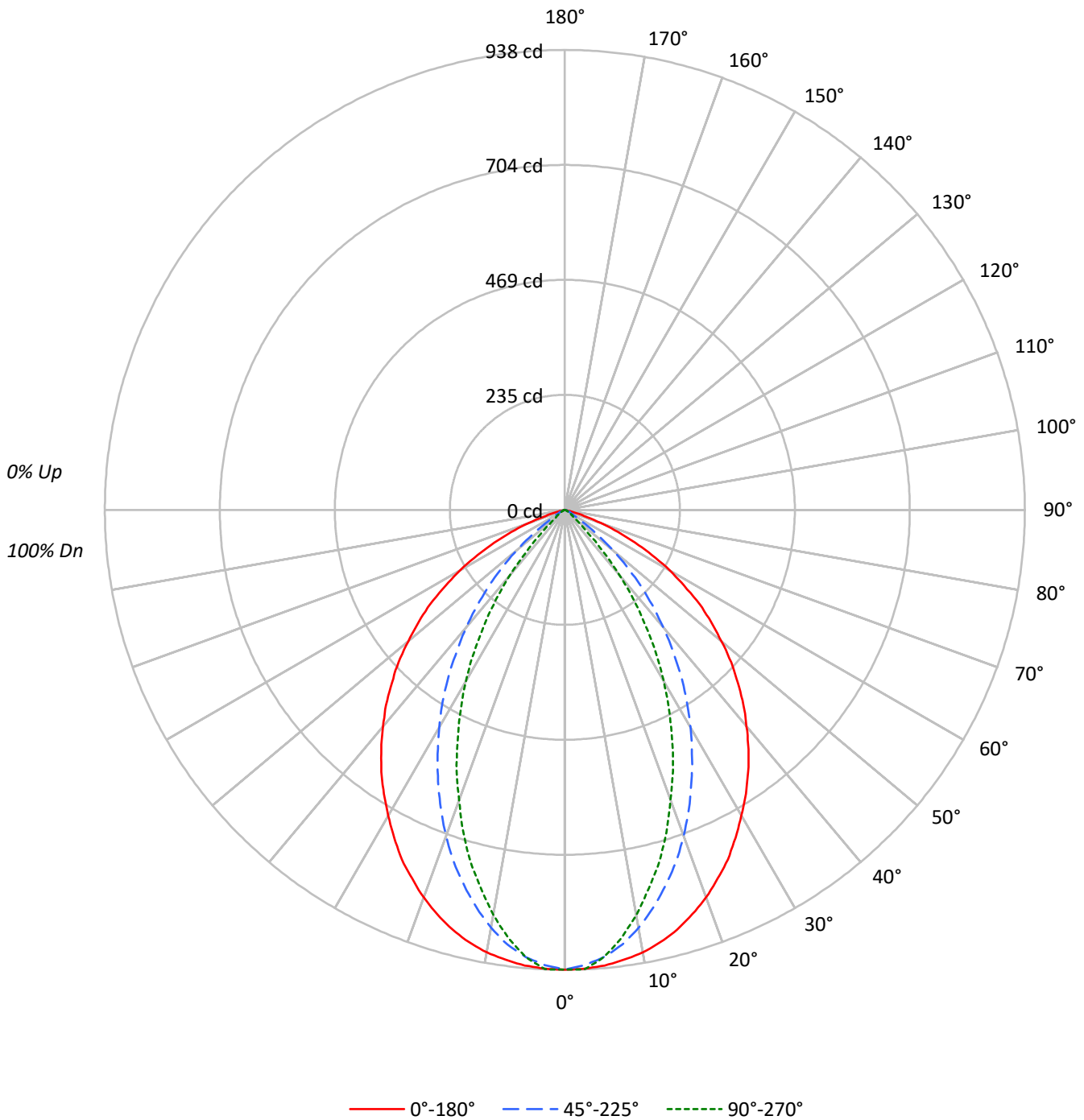
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1211.6 lumens  
Efficiency: N/A  
Efficacy: 34.6 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	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°	6458	6458	6458
5°	6448	6328	6328
10°	6410	6055	5865
15°	6315	5653	5300
20°	6165	5185	4615
25°	5978	4643	3929
30°	5725	4072	3207
35°	5481	3474	2402
40°	5183	2802	1557
45°	4855	2121	675
50°	4467	1352	252
55°	4025	594	178
60°	3408	256	120
65°	2581	161	60
70°	1570	74	24
75°	330	32	32
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4855 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.5	7.1
10°-20°	225.4	18.6
20°-30°	289.4	23.9
30°-40°	272.4	22.5
40°-50°	190.5	15.7
50°-60°	101.7	8.4
60°-70°	40.6	3.3
70°-80°	5.2	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°	601.2	49.6
0°-40°	873.6	72.1
0°-60°	1165.8	96.2
0°-90°	1211.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1211.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	938	938	938	938	938	
5°	933	930	916	918	916	89
15°	886	858	793	756	744	249
25°	787	718	611	544	517	361
35°	652	548	413	319	286	407
45°	499	374	218	105	69	385
55°	335	205	50	17	15	297
65°	158	63	10	5	4	158
75°	12	4	1	1	1	24
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	937.9	937.9	937.9	937.9	937.9
2.5°	936.6	937.9	929.2	936.6	937.9
5°	932.9	930.5	915.6	918.1	915.6
7.5°	925.5	919.3	894.6	885.9	881.0
10°	916.8	903.2	866.1	847.6	838.9
12.5°	903.2	883.4	831.5	803.0	790.6
15°	885.9	857.5	793.1	756.0	743.6
17.5°	864.9	827.8	753.5	707.7	689.2
20°	841.4	791.9	707.7	653.3	629.8
22.5°	814.2	757.2	660.7	600.1	576.6
25°	786.9	717.6	611.2	544.4	517.2
27.5°	753.5	676.8	561.7	490.0	460.3
30°	720.1	636.0	512.2	434.3	403.4
32.5°	686.7	592.7	462.8	376.1	345.2
35°	652.1	548.1	413.3	319.2	285.8
37.5°	614.9	503.6	360.1	264.8	230.1
40°	576.6	460.3	311.8	211.6	173.2
42.5°	539.5	417.0	263.5	159.6	117.5
45°	498.6	373.7	217.8	105.2	69.3
47.5°	460.3	331.6	170.7	60.6	35.9
50°	417.0	288.3	126.2	32.2	23.5
52.5°	376.1	246.2	84.1	21.0	18.6
55°	335.3	205.4	49.5	17.3	14.8
57.5°	288.3	165.8	27.2	13.6	11.1
60°	247.5	129.9	18.6	9.9	8.7
62.5°	200.4	95.3	13.6	7.4	6.2
65°	158.4	63.1	9.9	4.9	3.7
67.5°	117.5	37.1	6.2	2.5	2.5
70°	78.0	19.8	3.7	1.2	1.2
72.5°	40.8	8.7	2.5	1.2	1.2
75°	12.4	3.7	1.2	1.2	1.2
77.5°	0.0	1.2	0.0	0.0	1.2
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)