

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: P1061458

Luminaire Tested: S125RDR-S1090D840-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061458  
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-S1090D840-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: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

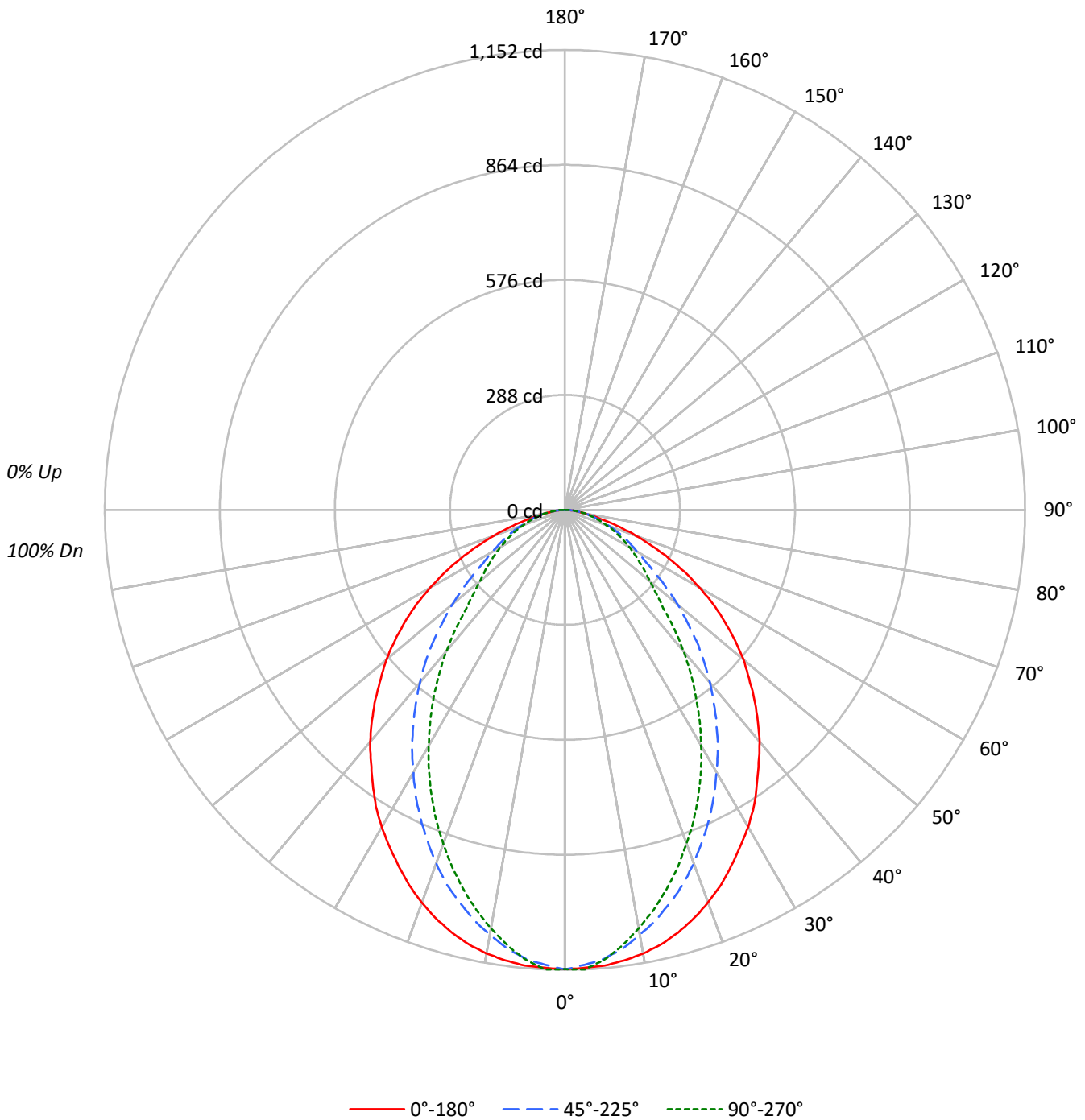
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2180.2 lumens  
Efficiency: N/A  
Efficacy: 62.3 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					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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89				87	
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77				75	
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67				65	
4	86	76	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59				57	
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52				50	
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47				45	
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42				40	
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38				36	
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35				33	
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32				30	

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

	0°	45°	90°
0°	7924	7924	7924
5°	7920	7799	7816
10°	7889	7557	7443
15°	7812	7259	7010
20°	7672	6904	6519
25°	7481	6493	5999
30°	7292	6030	5425
35°	7048	5567	4810
40°	6817	5076	4144
45°	6534	4539	3394
50°	6250	3935	2971
55°	5865	3286	2745
60°	5351	2874	2564
65°	4682	2626	2382
70°	3799	2365	2214
75°	2727	2160	2062
80°	1883	1931	1931
85°	1382	1675	1777

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6534 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	107.0	4.9
10°-20°	289.4	13.3
20°-30°	400.0	18.3
30°-40°	426.1	19.5
40°-50°	374.3	17.2
50°-60°	283.8	13.0
60°-70°	184.3	8.5
70°-80°	91.3	4.2
80°-90°	23.9	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°	796.4	36.5
0°-40°	1222.5	56.1
0°-60°	1880.7	86.3
0°-90°	2180.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2180.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1151	1151	1151	1151	1151	
5°	1146	1143	1128	1132	1131	109
15°	1096	1071	1018	995	983	309
25°	985	931	855	811	790	454
35°	838	761	662	602	572	525
45°	671	577	466	382	349	517
55°	489	392	274	236	229	436
65°	287	214	161	149	146	284
75°	102	90	81	79	78	114
85°	18	20	21	21	22	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1150.8	1150.8	1150.8	1150.8	1150.8
2.5°	1148.4	1150.8	1140.9	1149.6	1152.1
5°	1145.9	1143.4	1128.4	1132.1	1130.9
7.5°	1138.4	1133.4	1108.4	1105.9	1100.9
10°	1128.4	1115.9	1080.9	1072.1	1064.6
12.5°	1114.6	1094.6	1052.1	1034.6	1025.9
15°	1095.9	1070.9	1018.4	994.7	983.4
17.5°	1073.4	1038.4	983.4	950.9	938.4
20°	1047.1	1005.9	942.2	904.7	889.7
22.5°	1018.4	969.7	898.4	858.5	842.2
25°	984.7	930.9	854.7	811.0	789.7
27.5°	950.9	890.9	808.5	759.7	737.2
30°	917.2	848.5	758.5	706.0	682.3
32.5°	880.9	804.7	712.3	654.8	627.3
35°	838.5	761.0	662.3	602.3	572.3
37.5°	797.2	714.8	613.5	546.1	517.3
40°	758.5	671.0	564.8	491.1	461.1
42.5°	714.8	624.8	516.1	438.6	404.9
45°	671.0	577.3	466.1	382.4	348.6
47.5°	624.8	532.3	413.6	331.1	308.6
50°	583.5	486.1	367.4	292.4	277.4
52.5°	536.1	441.1	319.9	262.4	252.4
55°	488.6	392.4	273.7	236.2	228.7
57.5°	439.8	348.6	237.4	213.7	206.2
60°	388.6	303.6	208.7	189.9	186.2
62.5°	337.4	257.4	183.7	169.9	164.9
65°	287.4	213.7	161.2	148.7	146.2
67.5°	236.2	173.7	138.7	130.0	128.7
70°	188.7	141.2	117.5	112.5	110.0
72.5°	144.9	112.5	98.7	95.0	93.7
75°	102.5	90.0	81.2	78.7	77.5
77.5°	68.7	68.7	65.0	62.5	63.7
80°	47.5	50.0	48.7	48.7	48.7
82.5°	31.2	33.7	35.0	35.0	35.0
85°	17.5	20.0	21.2	21.2	22.5
87.5°	6.2	7.5	8.7	10.0	10.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)