

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: P1175354

Luminaire Tested: S125RDR-S1090D940-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2019
Report Number: P1175354
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-82)
Test Lab: INNOVATION CENTER
Issue Date: 8/18/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-S1090D940-X4F0-XX-UDD-WVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

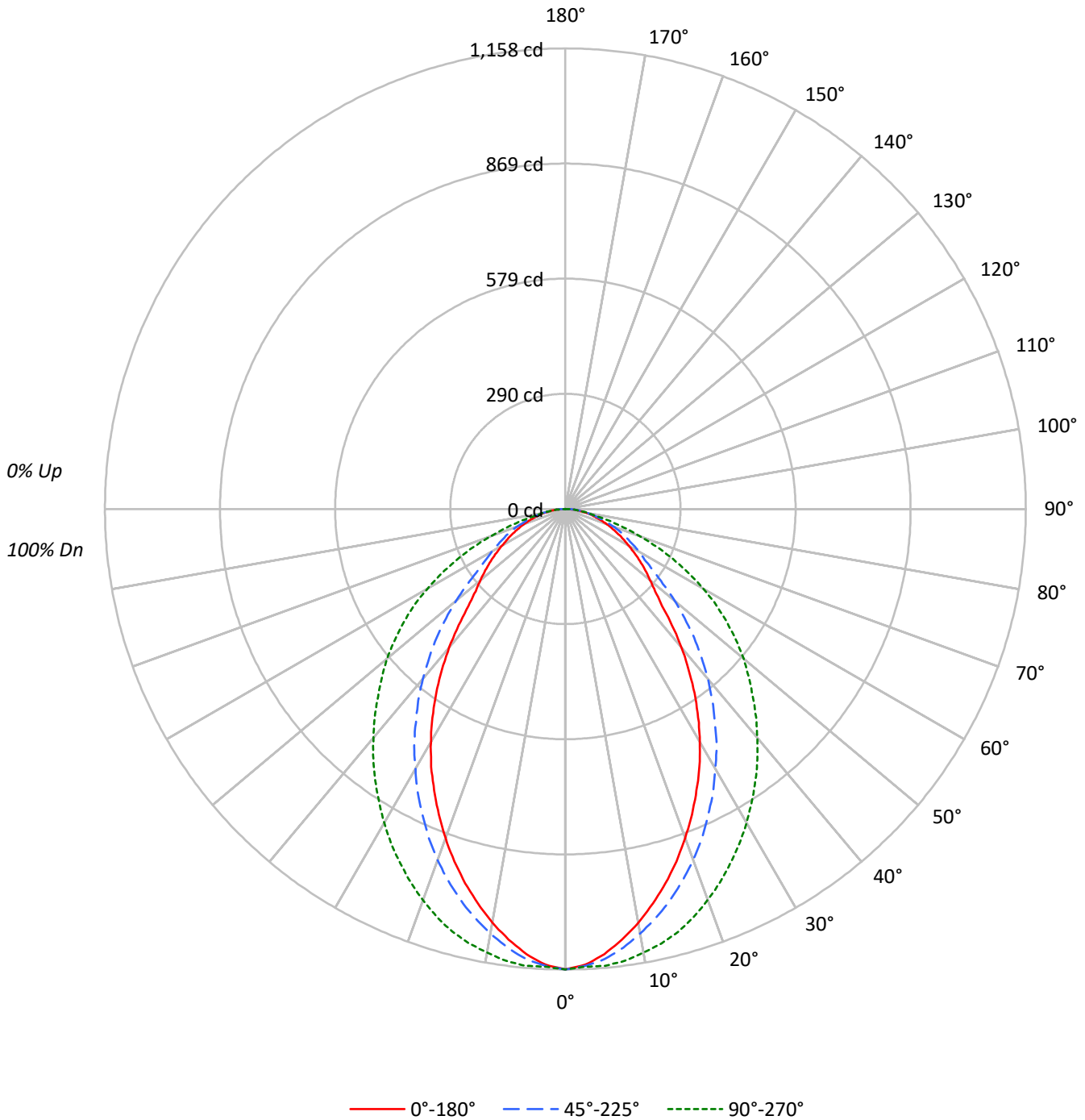
Lumens per Lamp: N/A
Luminaire Lumens: 2181.3 lumens
Efficiency: N/A
Efficacy: 62.3 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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									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	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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86																												
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74																												
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64																												
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56																												
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50																												
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44																												
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40																												
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36																												
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33																												
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7972	7972	7972
5°	7764	7853	7968
10°	7387	7579	7916
15°	6943	7259	7840
20°	6453	6885	7670
25°	5929	6451	7467
30°	5376	5994	7244
35°	4758	5511	7006
40°	4081	5009	6749
45°	3350	4460	6489
50°	2980	3833	6264
55°	2749	3209	5947
60°	2531	2923	5508
65°	2354	2755	4868
70°	2196	2573	3978
75°	2064	2378	2979
80°	1947	2181	2145
85°	1785	2172	1785

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6489 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.2	4.9
10°-20°	288.9	13.2
20°-30°	397.5	18.2
30°-40°	421.6	19.3
40°-50°	369.0	16.9
50°-60°	283.1	13.0
60°-70°	188.6	8.6
70°-80°	96.7	4.4
80°-90°	28.7	1.3
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°	793.6	36.4
0°-40°	1215.2	55.7
0°-60°	1867.3	85.6
0°-90°	2181.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2181.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1158	1158	1158	1158	1158	
5°	1123	1138	1136	1144	1153	105
15°	974	997	1018	1066	1100	273
25°	780	807	849	921	983	358
35°	566	593	656	752	834	353
45°	344	372	458	572	666	272
55°	229	234	267	397	495	205
65°	144	146	169	222	299	144
75°	78	83	89	94	112	83
85°	23	26	28	26	23	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1157.8	1157.8	1157.8	1157.8	1157.8
2.5°	1147.0	1158.8	1150.0	1150.9	1151.9
5°	1123.4	1138.2	1136.2	1144.1	1152.9
7.5°	1092.0	1107.7	1112.6	1132.3	1146.0
10°	1056.6	1074.3	1084.1	1113.6	1132.3
12.5°	1016.3	1036.9	1052.7	1091.0	1118.5
15°	974.0	996.6	1018.3	1066.4	1099.8
17.5°	928.8	951.4	979.9	1035.0	1075.3
20°	880.7	905.2	939.6	998.6	1046.8
22.5°	831.5	857.1	896.4	961.3	1016.3
25°	780.4	806.9	849.2	921.0	982.9
27.5°	730.3	754.8	804.0	880.7	948.5
30°	676.2	701.8	753.9	838.4	911.1
32.5°	622.2	647.7	707.7	796.1	872.8
35°	566.1	592.7	655.6	751.9	833.5
37.5°	510.1	537.6	607.4	706.7	793.2
40°	454.1	483.6	557.3	661.5	750.9
42.5°	397.1	428.5	506.2	617.2	709.6
45°	344.0	372.5	458.0	572.0	666.4
47.5°	305.7	322.4	406.9	525.8	625.1
50°	278.2	286.0	357.8	481.6	584.8
52.5°	253.6	258.5	309.6	440.3	540.6
55°	229.0	233.9	267.3	397.1	495.4
57.5°	205.4	208.4	235.9	353.8	450.2
60°	183.8	185.8	212.3	310.6	400.0
62.5°	164.1	165.1	189.7	266.4	349.9
65°	144.5	145.5	169.1	222.1	298.8
67.5°	126.8	126.8	149.4	181.8	249.7
70°	109.1	109.1	127.8	147.4	197.6
72.5°	93.4	95.3	108.1	118.9	154.3
75°	77.6	82.6	89.4	94.4	112.0
77.5°	62.9	68.8	71.7	73.7	74.7
80°	49.1	53.1	55.0	56.0	54.1
82.5°	36.4	39.3	40.3	40.3	37.3
85°	22.6	25.6	27.5	26.5	22.6
87.5°	10.8	14.7	15.7	13.8	10.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)