

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: P1056473

Luminaire Tested: S125R3DR-S850D840-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056473
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-12)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125R3DR-S850D840-X4F0-XX-UDD-FLL-S
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

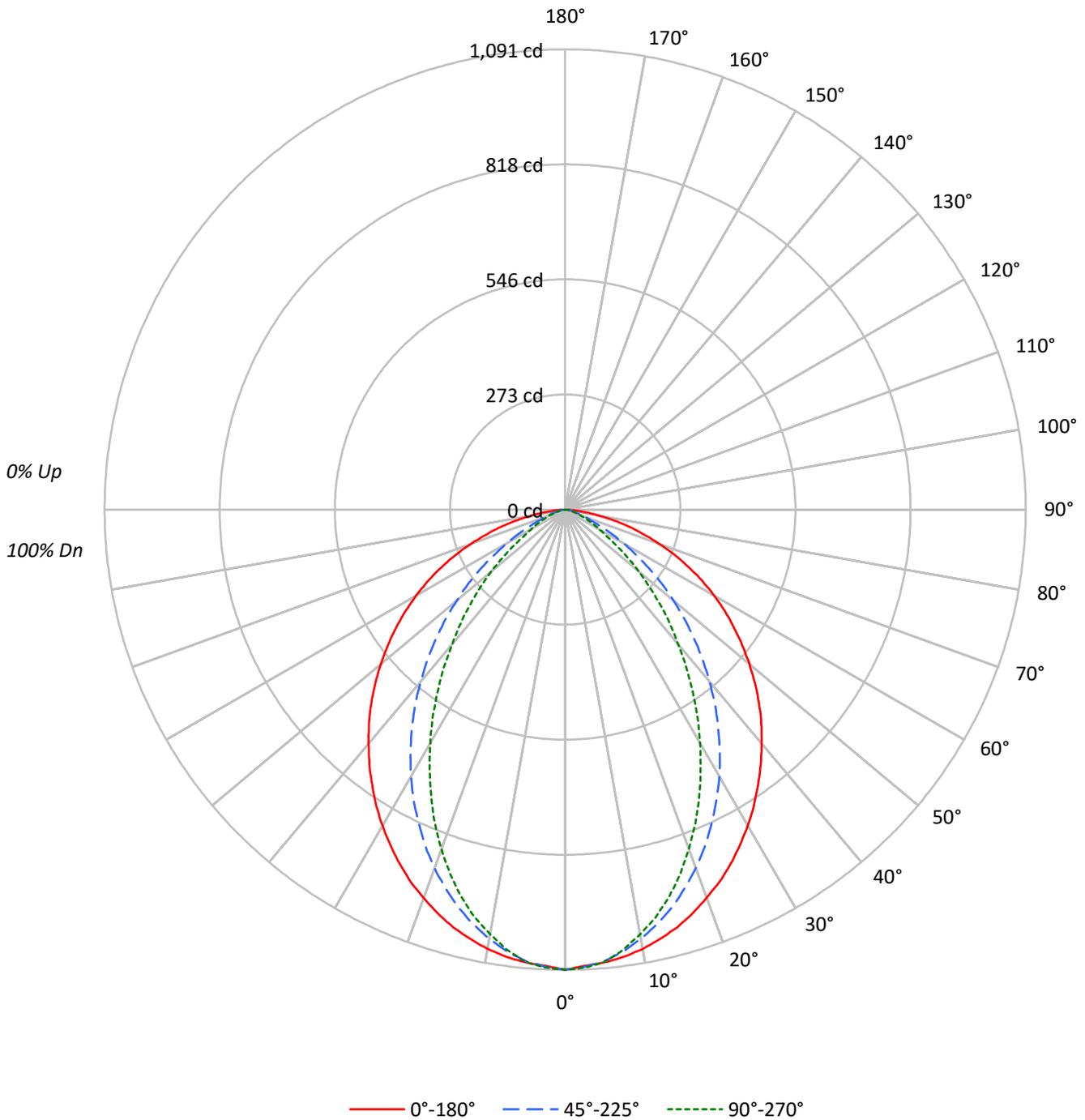
Lumens per Lamp: N/A
Luminaire Lumens: 1971.3 lumens
Efficiency: N/A
Efficacy: 74.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 26.4
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	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88
2	102	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77				77
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67				67
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59				59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52				52
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47				47
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	54	48	44	42				42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38				38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	36	35				35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32				32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7711	7711	7711
5°	7646	7625	7639
10°	7590	7416	7336
15°	7502	7147	6955
20°	7370	6807	6443
25°	7232	6404	5860
30°	7065	5960	5218
35°	6876	5456	4540
40°	6682	4902	3840
45°	6491	4321	3180
50°	6264	3677	2499
55°	6024	2988	1817
60°	5754	2227	1299
65°	5406	1470	1014
70°	4884	1023	709
75°	4247	661	552
80°	3330	493	452
85°	1720	406	324

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6491 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.6	5.2
10°-20°	276.2	14.0
20°-30°	381.9	19.4
30°-40°	404.6	20.5
40°-50°	353.2	17.9
50°-60°	251.2	12.7
60°-70°	139.7	7.1
70°-80°	53.7	2.7
80°-90°	9.3	0.5
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°	759.7	38.5
0°-40°	1164.3	59.1
0°-60°	1768.6	89.7
0°-90°	1971.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1971.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1091	1091	1091	1091	1091	
5°	1078	1086	1074	1072	1076	102
15°	1025	1016	976	955	950	289
25°	927	896	821	770	751	427
35°	797	742	632	555	526	498
45°	649	572	432	345	318	501
55°	489	392	242	168	147	437
65°	323	212	88	65	61	319
75°	156	61	24	20	20	165
85°	21	6	5	4	4	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1090.7	1090.7	1090.7	1090.7	1090.7
2.5°	1082.6	1093.7	1084.6	1085.6	1086.6
5°	1077.5	1085.6	1074.5	1071.5	1076.5
7.5°	1069.4	1075.5	1056.3	1049.3	1052.3
10°	1057.3	1059.3	1033.1	1023.0	1022.0
12.5°	1042.2	1039.2	1006.8	990.7	989.7
15°	1025.0	1015.9	976.5	955.3	950.3
17.5°	1003.8	989.7	941.2	913.9	905.8
20°	979.6	960.4	904.8	869.5	856.4
22.5°	955.3	929.1	864.4	820.0	805.9
25°	927.1	895.8	821.0	770.5	751.3
27.5°	896.8	859.4	776.6	718.0	694.8
30°	865.5	822.0	730.1	664.5	639.2
32.5°	832.1	782.6	681.7	610.0	583.7
35°	796.8	742.3	632.2	555.4	526.1
37.5°	761.4	700.8	583.7	501.9	471.6
40°	724.1	658.4	531.2	447.4	416.1
42.5°	687.7	615.0	481.7	395.9	367.6
45°	649.3	571.6	432.2	345.4	318.1
47.5°	610.0	526.1	382.7	297.9	270.6
50°	569.6	481.7	334.3	251.5	227.2
52.5°	529.2	437.3	288.8	207.0	185.8
55°	488.8	391.8	242.4	167.6	147.4
57.5°	448.4	347.4	198.9	131.3	113.1
60°	407.0	301.9	157.5	96.9	91.9
62.5°	365.6	257.5	122.2	79.8	75.7
65°	323.2	212.1	87.9	64.6	60.6
67.5°	280.7	170.7	63.6	49.5	46.5
70°	236.3	130.3	49.5	37.4	34.3
72.5°	193.9	93.9	35.3	27.3	26.3
75°	155.5	60.6	24.2	20.2	20.2
77.5°	117.1	36.4	17.2	15.1	15.1
80°	81.8	21.2	12.1	11.1	11.1
82.5°	49.5	11.1	8.1	7.1	7.1
85°	21.2	6.1	5.0	4.0	4.0
87.5°	4.0	2.0	2.0	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)