

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: P1056364

Luminaire Tested: S125R3DR-S1090D840-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056364
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-11)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125R3DR-S1090D840-X4F0-XX-UDD-FLL-B
Description: DEFINE 5, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

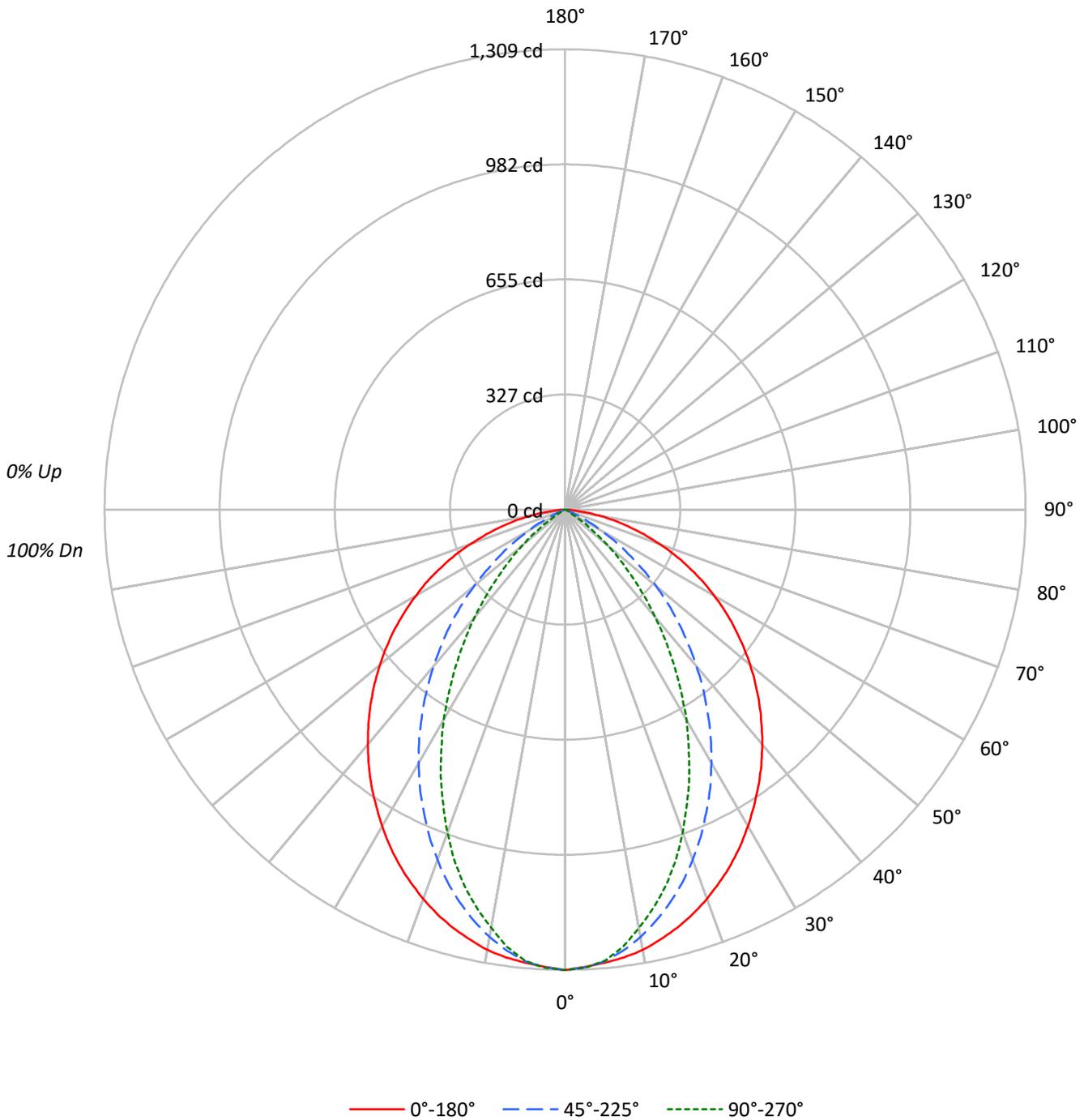
Lumens per Lamp: N/A
Luminaire Lumens: 2122.4 lumens
Efficiency: N/A
Efficacy: 61.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.89 / 1.07
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 34.7
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													100															
1	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89													89															
2	103	97	91	87	101	95	90	86	92	88	84	89	85	82	86	83	80	78													78															
3	96	87	81	75	94	86	80	75	83	78	74	80	76	72	78	74	71	69													69															
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	61													61															
5	83	72	64	59	81	71	64	58	69	63	58	67	62	57	65	61	57	55													55															
6	77	66	58	53	76	65	58	52	63	57	52	62	56	52	60	55	51	49													49															
7	72	61	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	45													45															
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41													41															
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37													37															
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34													34															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9257	9257	9257
5°	9182	9154	9145
10°	9129	8860	8673
15°	9014	8463	8102
20°	8865	7977	7352
25°	8696	7409	6519
30°	8485	6791	5636
35°	8276	6104	4659
40°	8048	5365	3689
45°	7810	4580	2672
50°	7550	3696	1727
55°	7262	2703	768
60°	6918	1670	221
65°	6490	607	130
70°	5874	215	54
75°	5105	71	36
80°	3908	53	0
85°	1793	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7810 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.6	5.7
10°-20°	326.6	15.4
20°-30°	441.8	20.8
30°-40°	453.9	21.4
40°-50°	376.0	17.7
50°-60°	241.4	11.4
60°-70°	116.6	5.5
70°-80°	39.5	1.9
80°-90°	5.1	0.2
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°	890.0	41.9
0°-40°	1343.9	63.3
0°-60°	1961.3	92.4
0°-90°	2122.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2122.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1309	1309	1309	1309	1309	
5°	1294	1304	1290	1282	1289	123
15°	1232	1216	1156	1116	1107	347
25°	1115	1060	950	864	836	513
35°	959	867	707	584	540	600
45°	781	653	458	317	267	602
55°	589	432	219	96	62	527
65°	388	214	36	10	8	384
75°	187	40	3	1	1	198
85°	22	0	0	0	0	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1309.4	1309.4	1309.4	1309.4	1309.4
2.5°	1301.6	1312.0	1302.9	1301.6	1304.2
5°	1293.9	1304.2	1290.0	1282.2	1288.7
7.5°	1284.8	1290.0	1265.3	1252.3	1254.9
10°	1271.8	1270.5	1234.2	1212.1	1208.2
12.5°	1252.3	1245.8	1197.8	1166.7	1160.2
15°	1231.6	1216.0	1156.3	1116.1	1107.0
17.5°	1206.9	1182.2	1110.9	1059.0	1046.0
20°	1178.4	1144.6	1060.3	996.7	977.2
22.5°	1147.2	1104.4	1007.1	931.8	905.8
25°	1114.8	1060.3	949.9	864.3	835.7
27.5°	1078.4	1014.8	892.8	795.5	760.5
30°	1039.5	966.8	831.9	725.4	690.4
32.5°	999.3	918.8	770.9	655.4	612.5
35°	959.0	866.9	707.3	584.0	539.9
37.5°	916.2	815.0	645.0	516.5	468.5
40°	872.1	761.8	581.4	446.4	399.7
42.5°	826.7	707.3	517.8	380.2	332.2
45°	781.2	652.8	458.1	316.6	267.3
47.5°	734.5	597.0	395.8	254.4	211.5
50°	686.5	542.5	336.1	198.6	157.0
52.5°	638.5	486.7	275.1	144.0	106.4
55°	589.2	432.1	219.3	96.0	62.3
57.5°	539.9	376.3	167.4	53.2	23.4
60°	489.3	323.1	118.1	18.2	15.6
62.5°	439.9	266.0	74.0	14.3	11.7
65°	388.0	214.1	36.3	10.4	7.8
67.5°	337.4	164.8	15.6	6.5	3.9
70°	284.2	119.4	10.4	3.9	2.6
72.5°	234.9	76.6	6.5	2.6	1.3
75°	186.9	40.2	2.6	1.3	1.3
77.5°	140.2	16.9	1.3	1.3	1.3
80°	96.0	7.8	1.3	1.3	0.0
82.5°	57.1	2.6	1.3	1.3	0.0
85°	22.1	0.0	0.0	0.0	0.0
87.5°	1.3	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)