

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: P1056363

Luminaire Tested: S125R3DR-S1090D835-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056363
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-10)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125R3DR-S1090D835-X4F0-XX-UDD-FLL-W
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

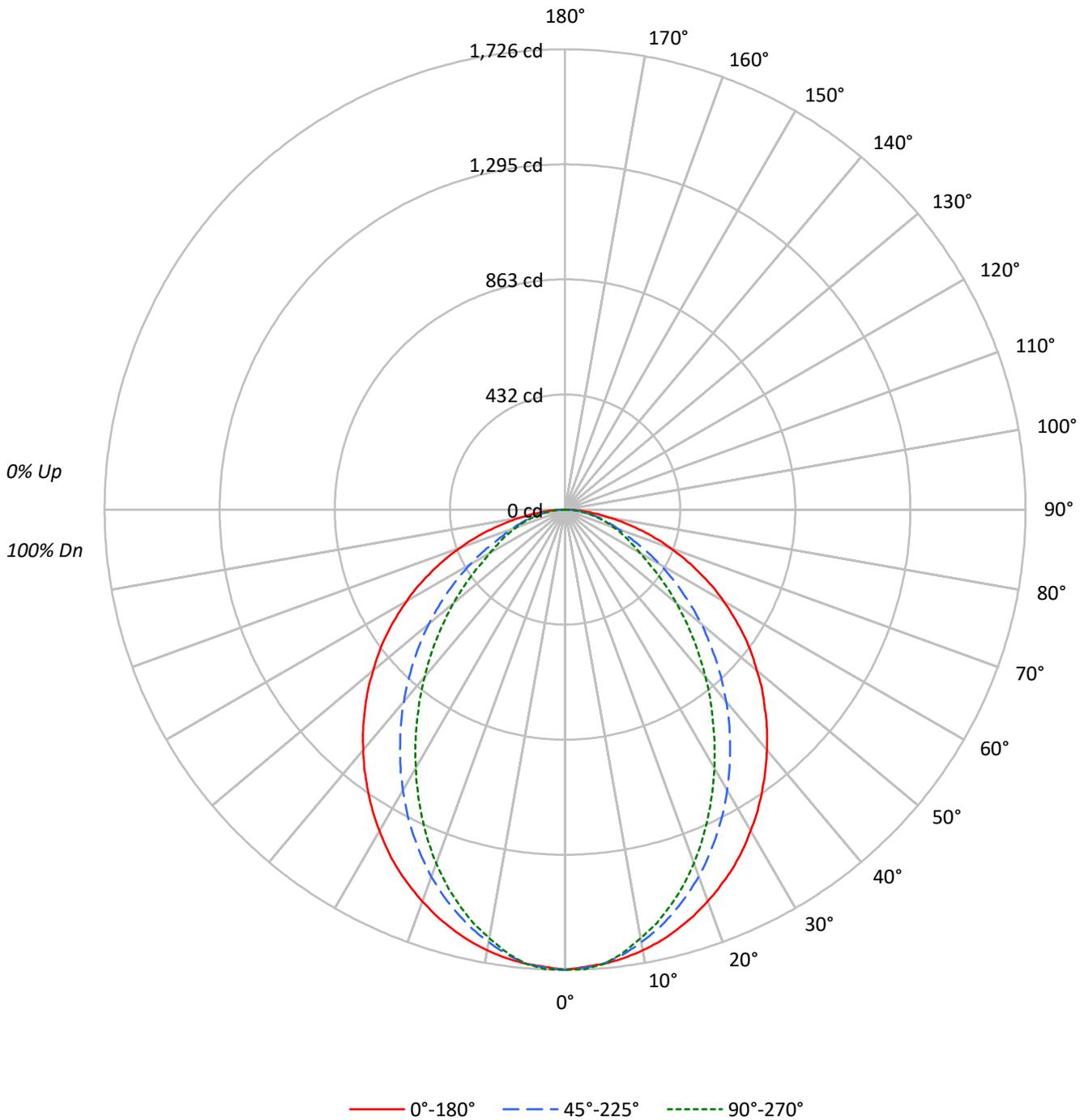
Lumens per Lamp: N/A
Luminaire Lumens: 3657.9 lumens
Efficiency: N/A
Efficacy: 105.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1056363

CATALOG NUMBER: S125R3DR-S1090D835-X4F0-XX-UDD-FLL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1056363

CATALOG NUMBER: S125R3DR-S1090D835-X4F0-XX-UDD-FLL-W

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	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86				
2	101	93	87	81	98	91	85	80	88	83	79	84	80	77	81	78	75	73				
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63				
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55				
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48				
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43				
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38				
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34				
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31				
10	56	43	36	31	55	43	35	30	42	35	30	41	35	30	40	34	30	28				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12200	12200	12200
5°	12128	12120	12128
10°	12047	11826	11715
15°	11926	11465	11230
20°	11765	11021	10625
25°	11587	10495	9903
30°	11360	9924	9137
35°	11112	9305	8340
40°	10863	8669	7554
45°	10599	8004	6770
50°	10317	7321	5993
55°	10057	6573	5211
60°	9702	5778	4578
65°	9222	4901	4255
70°	8658	4382	3985
75°	7828	4037	3756
80°	6803	3664	3505
85°	5313	3228	3228

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10599 cd/sqm



TEST NUMBER: P1056363

CATALOG NUMBER: S125R3DR-S1090D835-X4F0-XX-UDD-FLL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.5	4.4
10°-20°	443.4	12.1
20°-30°	626.3	17.1
30°-40°	689.5	18.8
40°-50°	643.1	17.6
50°-60°	513.4	14.0
60°-70°	345.5	9.4
70°-80°	184.0	5.0
80°-90°	51.2	1.4
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°	1231.2	33.7
0°-40°	1920.7	52.5
0°-60°	3077.2	84.1
0°-90°	3657.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3657.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1726	1726	1726	1726	1726	
5°	1709	1723	1708	1703	1709	162
15°	1630	1620	1566	1540	1534	459
25°	1486	1441	1346	1286	1270	684
35°	1288	1212	1078	993	966	806
45°	1060	960	801	703	677	819
55°	816	693	533	448	423	728
65°	551	430	293	260	254	547
75°	287	190	148	139	138	305
85°	66	45	40	41	40	78
90°	0	0	0	0	0	



TEST NUMBER: P1056363

CATALOG NUMBER: S125R3DR-S1090D835-X4F0-XX-UDD-FLL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1725.8	1725.8	1725.8	1725.8	1725.8
2.5°	1716.8	1731.0	1719.4	1722.0	1724.6
5°	1709.1	1723.3	1707.9	1702.7	1709.1
7.5°	1696.3	1707.9	1682.2	1670.6	1675.7
10°	1678.3	1686.0	1647.5	1632.0	1632.0
12.5°	1656.4	1656.4	1610.2	1588.3	1588.3
15°	1629.5	1620.5	1566.5	1539.5	1534.4
17.5°	1598.6	1581.9	1517.7	1483.0	1476.5
20°	1563.9	1536.9	1465.0	1420.0	1412.3
22.5°	1525.4	1490.7	1407.1	1351.9	1342.9
25°	1485.5	1440.6	1345.5	1286.4	1269.6
27.5°	1440.6	1386.6	1282.5	1215.7	1195.1
30°	1391.7	1330.0	1215.7	1141.1	1119.3
32.5°	1341.6	1272.2	1147.6	1067.9	1043.5
35°	1287.6	1211.8	1078.2	993.4	966.4
37.5°	1233.7	1151.4	1010.1	921.4	893.1
40°	1177.1	1087.2	939.4	848.1	818.6
42.5°	1120.6	1024.2	870.0	777.5	746.6
45°	1060.2	959.9	800.6	702.9	677.2
47.5°	1002.4	894.4	732.5	637.4	609.1
50°	938.1	826.3	665.7	570.6	544.9
52.5°	879.0	759.5	598.8	510.2	483.2
55°	816.0	692.7	533.3	448.5	422.8
57.5°	750.5	625.8	470.3	390.7	366.2
60°	686.2	559.0	408.7	335.4	323.8
62.5°	620.7	496.0	350.8	294.3	286.6
65°	551.3	430.5	293.0	259.6	254.4
67.5°	485.8	367.5	246.7	227.5	222.3
70°	418.9	304.6	212.0	195.3	192.8
72.5°	353.4	244.2	178.6	167.1	164.5
75°	286.6	190.2	147.8	138.8	137.5
77.5°	224.9	142.6	116.9	113.1	110.5
80°	167.1	106.7	90.0	87.4	86.1
82.5°	114.4	73.2	64.3	64.3	61.7
85°	65.5	45.0	39.8	41.1	39.8
87.5°	24.4	19.3	18.0	19.3	19.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)