

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: P1055235

Luminaire Tested: S122R3DR-S675D850-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055235
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122R3DR-S675D850-X4F0-XX-UDD-FLL-W
Description: DEFINE 2, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

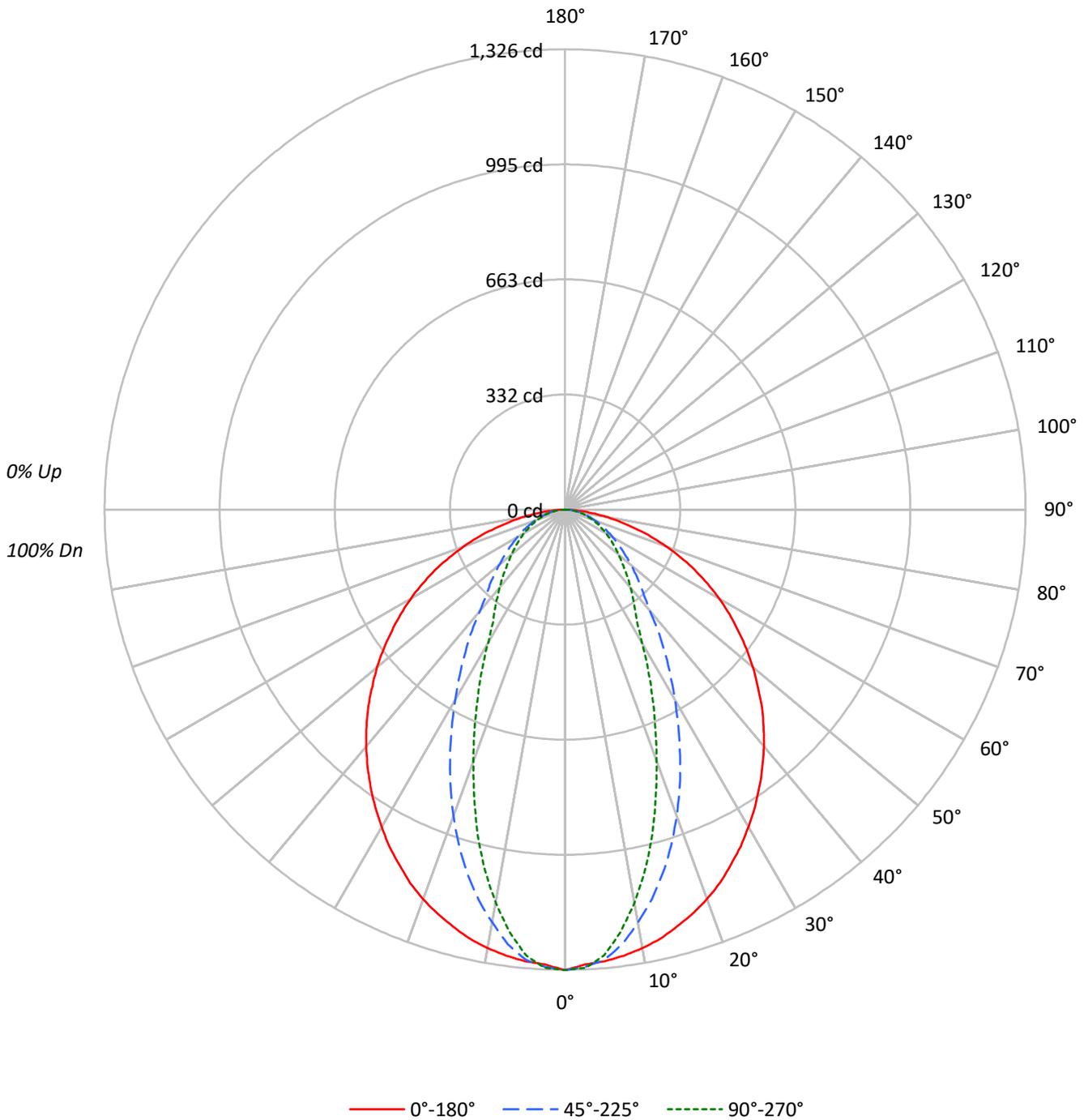
Lumens per Lamp: N/A
Luminaire Lumens: 2006.2 lumens
Efficiency: N/A
Efficacy: 76.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.71 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1055235

CATALOG NUMBER: S122R3DR-S675D850-X4F0-XX-UDD-FLL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1055235

CATALOG NUMBER: S122R3DR-S675D850-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	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87				
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75				
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66				
4	87	76	69	63	85	75	68	62	73	66	61	71	65	61	68	64	60	58				
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	54	52				
6	75	63	55	50	74	63	55	49	61	54	49	59	53	49	58	52	48	46				
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42				
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38				
9	62	50	43	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35				
10	59	47	39	35	58	46	39	34	45	39	34	44	38	34	43	38	34	32				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	25130	25130	25130
5°	24845	24762	24530
10°	24684	23234	22124
15°	24406	21295	19034
20°	24081	18938	15541
25°	23601	16368	12403
30°	23098	13828	9680
35°	22571	11569	8132
40°	22024	9381	7242
45°	21454	8201	6479
50°	20821	7257	5916
55°	20109	6557	5496
60°	19416	5968	5127
65°	18492	5469	4824
70°	17139	5096	4548
75°	15182	4626	4304
80°	12951	4353	3993
85°	8913	3848	3608

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 21454 cd/sqm



TEST NUMBER: P1055235

CATALOG NUMBER: S122R3DR-S675D850-X4F0-XX-UDD-FLL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.5	6.1
10°-20°	306.9	15.3
20°-30°	378.1	18.8
30°-40°	362.8	18.1
40°-50°	312.9	15.6
50°-60°	242.8	12.1
60°-70°	166.2	8.3
70°-80°	90.3	4.5
80°-90°	24.7	1.2
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°	806.5	40.2
0°-40°	1169.3	58.3
0°-60°	1725.0	86.0
0°-90°	2006.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2006.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1326	1326	1326	1326	1326	
5°	1306	1325	1302	1285	1290	124
15°	1244	1207	1086	997	970	351
25°	1129	1008	783	639	593	520
35°	976	774	500	373	352	610
45°	801	539	306	253	242	617
55°	609	324	198	172	166	545
65°	412	176	122	111	108	407
75°	207	81	63	60	59	222
85°	41	20	18	18	17	52
90°	0	0	0	0	0	



TEST NUMBER: P1055235

CATALOG NUMBER: S122R3DR-S675D850-X4F0-XX-UDD-FLL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1326.4	1326.4	1326.4	1326.4	1326.4
2.5°	1311.9	1334.1	1318.6	1318.6	1321.9
5°	1306.4	1325.3	1302.0	1285.3	1289.8
7.5°	1296.4	1309.7	1263.2	1227.7	1226.6
10°	1283.1	1284.2	1207.7	1161.1	1150.0
12.5°	1266.5	1248.7	1151.1	1081.3	1064.6
15°	1244.3	1206.6	1085.7	997.0	970.4
17.5°	1221.0	1163.3	1015.8	904.9	868.3
20°	1194.4	1111.2	939.3	812.9	770.8
22.5°	1164.5	1061.3	862.8	724.2	679.8
25°	1129.0	1008.1	783.0	638.8	593.3
27.5°	1094.6	953.7	706.4	563.4	516.8
30°	1055.8	895.0	632.1	491.3	442.5
32.5°	1017.0	835.1	563.4	422.5	385.9
35°	975.9	774.1	500.2	372.6	351.6
37.5°	933.8	714.2	440.3	339.4	320.5
40°	890.5	654.3	379.3	307.2	292.8
42.5°	846.2	595.5	337.1	280.6	267.3
45°	800.7	539.0	306.1	252.9	241.8
47.5°	751.9	482.4	276.1	229.6	219.6
50°	706.4	428.1	246.2	208.5	200.7
52.5°	657.6	374.8	221.8	189.6	183.0
55°	608.8	323.8	198.5	171.9	166.4
57.5°	561.2	275.0	176.3	155.3	150.8
60°	512.4	236.2	157.5	139.7	135.3
62.5°	462.5	205.2	139.7	125.3	120.9
65°	412.5	176.3	122.0	110.9	107.6
67.5°	360.4	148.6	106.5	97.6	95.4
70°	309.4	124.2	92.0	84.3	82.1
72.5°	259.5	100.9	77.6	72.1	69.9
75°	207.4	81.0	63.2	59.9	58.8
77.5°	161.9	63.2	51.0	48.8	47.7
80°	118.7	46.6	39.9	37.7	36.6
82.5°	78.7	32.2	28.8	27.7	26.6
85°	41.0	20.0	17.7	17.7	16.6
87.5°	13.3	8.9	8.9	8.9	7.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)