

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1058047

Luminaire Tested: S122RDRP-S675D835-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058047
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S675D835-X4F0-XX-UDD-WVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

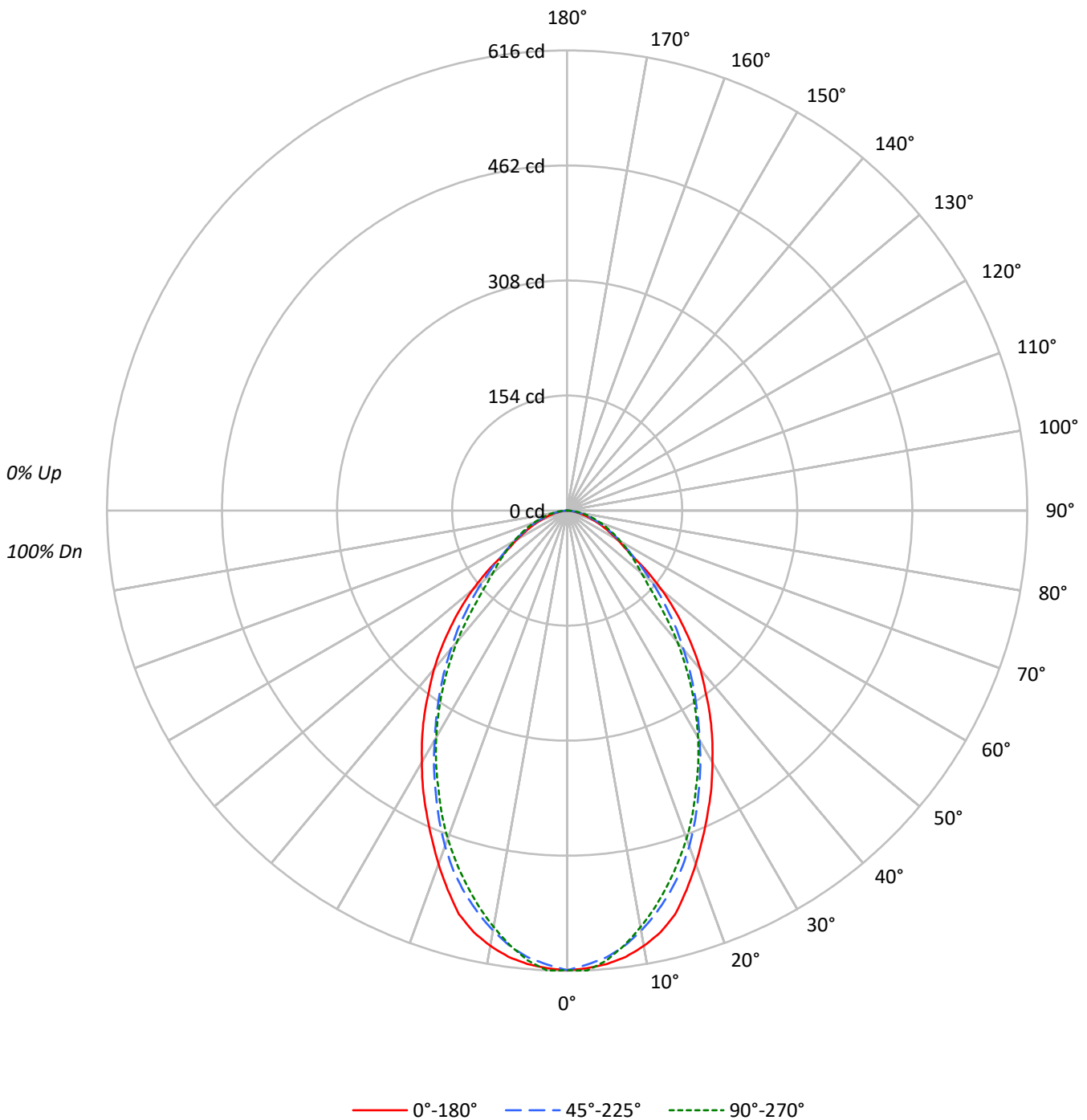
Lumens per Lamp: N/A
Luminaire Lumens: 934.3 lumens
Efficiency: N/A
Efficacy: 36.2 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
Input Current (A_{in}): 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: P1058047

CATALOG NUMBER: S122RDRP-S675D835-X4F0-XX-UDD-WVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1058047

CATALOG NUMBER: S122RDRP-S675D835-X4F0-XX-UDD-WVL-B

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11352	11352	11352
5°	11286	11123	11195
10°	11087	10701	10609
15°	10686	10125	9918
20°	9887	9388	9176
25°	9074	8476	8317
30°	8286	7555	7472
35°	7504	6686	6533
40°	6677	5829	5521
45°	5751	5010	4423
50°	4754	4217	3712
55°	3436	3497	3339
60°	2856	3000	3037
65°	2436	2611	2781
70°	2007	2325	2536
75°	1675	1953	2303
80°	1254	1562	2083
85°	423	826	1863

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5751 cd/sqm



TEST NUMBER: P1058047

CATALOG NUMBER: S122RDRP-S675D835-X4F0-XX-UDD-WVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.9	6.1
10°-20°	149.8	16.0
20°-30°	193.8	20.7
30°-40°	190.1	20.3
40°-50°	149.7	16.0
50°-60°	98.1	10.5
60°-70°	59.7	6.4
70°-80°	29.8	3.2
80°-90°	6.4	0.7
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°	400.4	42.9
0°-40°	590.5	63.2
0°-60°	838.3	89.7
0°-90°	934.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	934.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	615	615	615	615	615	
5°	609	609	600	604	604	58
15°	559	552	530	523	519	156
25°	446	431	416	414	408	205
35°	333	314	297	296	290	208
45°	220	207	192	178	170	170
55°	107	113	109	105	104	101
65°	56	57	60	63	64	56
75°	24	24	27	31	32	25
85°	2	3	4	7	9	4
90°	0	0	0	0	0	



TEST NUMBER: P1058047

CATALOG NUMBER: S122RDRP-S675D835-X4F0-XX-UDD-WVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	615.2	615.2	615.2	615.2	615.2
2.5°	613.2	614.2	608.3	614.2	616.2
5°	609.3	609.3	600.5	604.4	604.4
7.5°	602.5	601.5	587.8	587.8	586.8
10°	591.7	587.8	571.1	568.2	566.2
12.5°	578.0	571.1	551.5	546.6	543.7
15°	559.4	551.5	530.0	523.1	519.2
17.5°	531.9	524.1	505.5	497.6	493.7
20°	503.5	491.8	478.1	471.2	467.3
22.5°	474.1	460.4	447.7	442.8	438.9
25°	445.7	431.0	416.3	414.4	408.5
27.5°	418.3	400.7	386.0	385.0	380.1
30°	388.9	370.3	354.6	355.6	350.7
32.5°	361.5	343.8	325.2	326.2	320.3
35°	333.1	314.5	296.8	295.8	290.0
37.5°	303.7	286.1	269.4	265.5	259.6
40°	277.2	259.6	242.0	235.1	229.2
42.5°	248.8	233.2	217.5	206.7	198.9
45°	220.4	206.7	192.0	178.3	169.5
47.5°	193.0	182.2	169.5	152.8	146.9
50°	165.6	157.7	146.9	132.2	129.3
52.5°	137.1	134.2	127.4	117.6	116.6
55°	106.8	112.7	108.7	104.8	103.8
57.5°	90.1	91.1	94.0	93.1	93.1
60°	77.4	77.4	81.3	82.3	82.3
62.5°	65.6	66.6	70.5	72.5	72.5
65°	55.8	56.8	59.8	62.7	63.7
67.5°	46.0	48.0	50.9	53.9	54.9
70°	37.2	39.2	43.1	46.0	47.0
72.5°	30.4	31.3	35.3	38.2	39.2
75°	23.5	24.5	27.4	31.3	32.3
77.5°	16.7	18.6	21.6	24.5	26.4
80°	11.8	12.7	14.7	18.6	19.6
82.5°	6.9	7.8	9.8	12.7	13.7
85°	2.0	2.9	3.9	6.9	8.8
87.5°	0.0	0.0	0.0	2.0	3.9
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1058047
 CATALOG NUMBER: S122RDRP-S675D835-X4F0-XX-UDD-WVL-B

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	14.56	15.96	14.93	16.27	16.59	14.74	16.14	15.11	16.45	16.77
	3H	15.69	16.94	16.07	17.27	17.63	16.20	17.45	16.58	17.78	18.14
	4H	16.05	17.21	16.45	17.56	17.94	16.74	17.91	17.15	18.26	18.64
	6H	16.23	17.30	16.64	17.67	18.06	17.16	18.23	17.57	18.60	18.99
	8H	16.26	17.28	16.69	17.67	18.07	17.28	18.30	17.71	18.69	19.09
	12H	16.24	17.22	16.68	17.60	18.03	17.37	18.34	17.80	18.72	19.15
4H	2H	15.02	16.18	15.42	16.53	16.92	15.17	16.33	15.57	16.68	17.07
	3H	16.36	17.32	16.77	17.72	18.12	16.84	17.80	17.25	18.20	18.61
	4H	16.80	17.66	17.24	18.08	18.52	17.51	18.37	17.94	18.78	19.22
	6H	17.08	17.82	17.54	18.26	18.73	18.04	18.78	18.50	19.23	19.69
	8H	17.12	17.82	17.59	18.26	18.73	18.21	18.90	18.68	19.35	19.82
	12H	17.12	17.73	17.60	18.21	18.69	18.33	18.94	18.81	19.43	19.90
8H	4H	17.02	17.71	17.49	18.16	18.63	17.65	18.35	18.12	18.79	19.26
	6H	17.37	17.93	17.87	18.43	18.91	18.29	18.85	18.79	19.35	19.83
	8H	17.44	17.95	17.96	18.47	18.96	18.52	19.03	19.04	19.54	20.03
	12H	17.46	17.91	17.97	18.40	18.97	18.70	19.15	19.22	19.65	20.22
12H	4H	17.03	17.65	17.51	18.13	18.60	17.64	18.26	18.13	18.74	19.21
	6H	17.39	17.90	17.91	18.41	18.90	18.28	18.79	18.80	19.30	19.79
	8H	17.51	17.96	18.02	18.45	19.02	18.56	19.01	19.07	19.50	20.07