

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: P1058043

Luminaire Tested: S122RDRP-S675D835-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058043
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S675D835-X4F0-XX-UDD-BVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

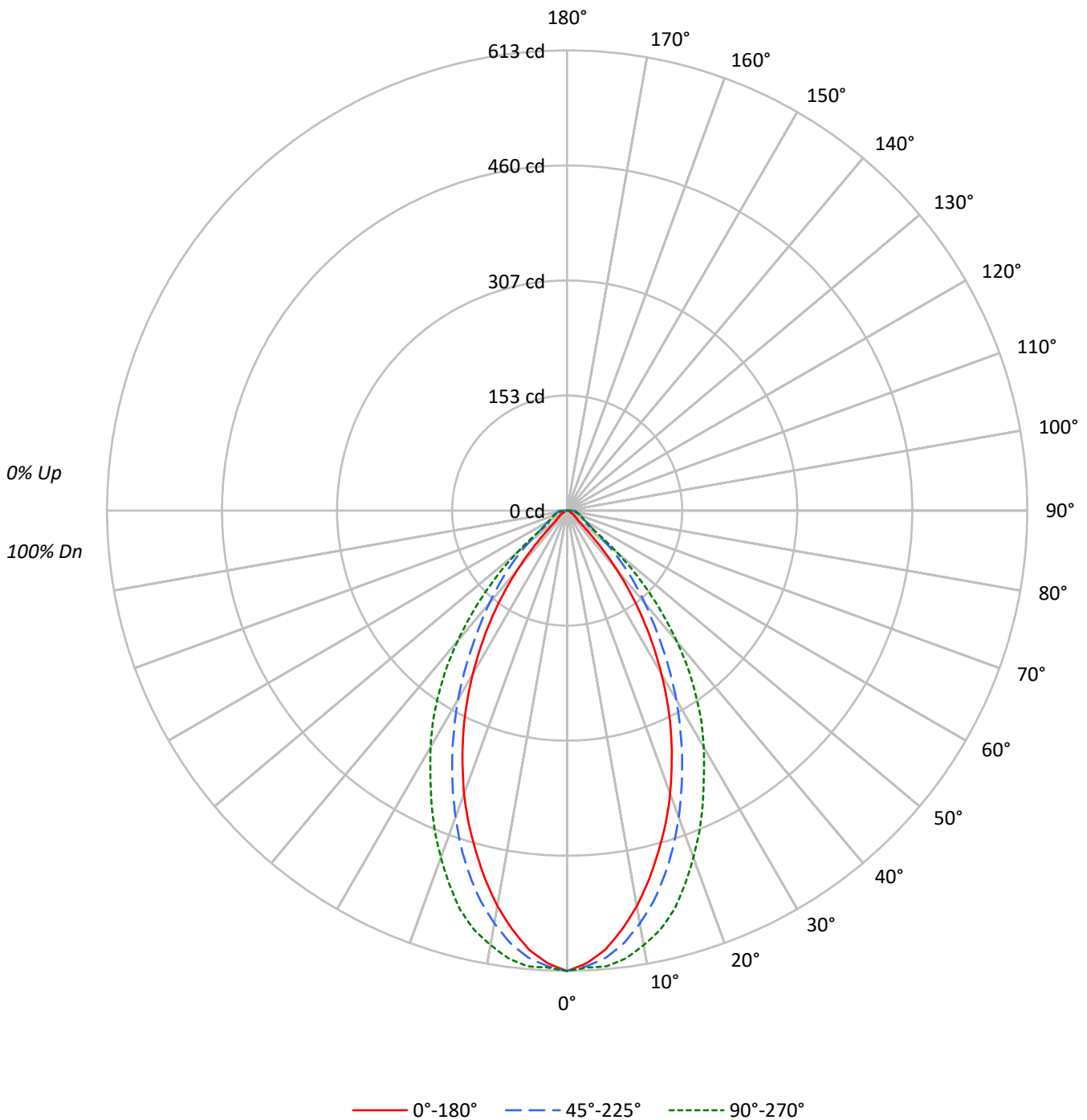
Lumens per Lamp: N/A
Luminaire Lumens: 667.5 lumens
Efficiency: N/A
Efficacy: 25.9 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

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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	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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90																												
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81																												
3	98	91	85	80	96	89	84	79	86	82	78	84	80	76	81	78	75	74																												
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67																												
5	87	77	70	65	85	76	70	65	74	69	64	72	67	64	71	66	63	61																												
6	82	72	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58	56																												
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	52																												
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50	48																												
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45																												
10	66	55	48	44	64	54	48	44	53	48	44	53	47	43	52	47	43	42																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11317	11317	11317
5°	10869	11069	11286
10°	10021	10461	11012
15°	8979	9598	10516
20°	7880	8536	9653
25°	6672	7372	8710
30°	5352	6188	7756
35°	3956	4951	6720
40°	2481	3876	5461
45°	973	2920	4045
50°	479	1972	2477
55°	380	1293	1103
60°	288	1052	1015
65°	214	987	987
70°	264	1003	1003
75°	278	1119	1048
80°	414	1456	1148
85°	826	2498	1651

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 4569 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.0	8.4
10°-20°	141.6	21.2
20°-30°	169.4	25.4
30°-40°	142.6	21.4
40°-50°	81.2	12.2
50°-60°	32.0	4.8
60°-70°	20.2	3.0
70°-80°	15.0	2.2
80°-90°	9.5	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°	367.0	55.0
0°-40°	509.6	76.3
0°-60°	622.8	93.3
0°-90°	667.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	667.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	613	613	613	613	613	
5°	587	600	598	604	609	54
15°	470	487	502	532	550	131
25°	328	342	362	399	428	149
35°	176	191	220	267	298	109
45°	37	66	112	140	155	35
55°	12	26	40	41	34	11
65°	5	23	23	22	23	5
75°	4	16	16	15	15	4
85°	4	11	12	11	8	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	613.3	613.3	613.3	613.3	613.3
2.5°	603.4	614.2	607.4	608.3	609.3
5°	586.8	599.5	597.6	604.4	609.3
7.5°	562.2	576.0	580.9	592.7	601.5
10°	534.8	550.5	558.3	577.0	587.7
12.5°	503.4	521.0	532.8	556.3	572.0
15°	470.0	486.7	502.4	531.8	550.5
17.5°	436.6	453.3	470.0	502.4	522.0
20°	401.3	417.0	434.7	469.0	491.6
22.5°	364.0	380.7	398.4	433.7	461.2
25°	327.7	342.4	362.1	399.4	427.8
27.5°	289.5	304.2	325.8	364.0	394.4
30°	251.2	265.9	290.4	329.7	364.0
32.5°	212.9	228.6	255.1	298.3	332.6
35°	175.6	191.3	219.8	266.9	298.3
37.5°	139.3	157.0	188.4	234.5	263.9
40°	103.0	123.6	160.9	202.1	226.7
42.5°	68.7	94.2	135.4	169.7	190.4
45°	37.3	65.7	111.9	140.3	155.0
47.5°	20.6	42.2	89.3	111.9	120.7
50°	16.7	29.4	68.7	85.4	86.3
52.5°	13.7	26.5	51.0	60.8	55.9
55°	11.8	25.5	40.2	41.2	34.3
57.5°	9.8	24.5	33.4	29.4	29.4
60°	7.8	24.5	28.5	26.5	27.5
62.5°	5.9	24.5	25.5	23.5	24.5
65°	4.9	22.6	22.6	21.6	22.6
67.5°	4.9	20.6	20.6	19.6	20.6
70°	4.9	19.6	18.6	18.6	18.6
72.5°	3.9	17.7	17.7	16.7	16.7
75°	3.9	15.7	15.7	14.7	14.7
77.5°	3.9	14.7	14.7	13.7	12.8
80°	3.9	12.8	13.7	12.8	10.8
82.5°	3.9	11.8	12.8	11.8	8.8
85°	3.9	10.8	11.8	10.8	7.8
87.5°	2.9	10.8	10.8	8.8	5.9
90°	0.0	0.0	0.0	0.0	0.0



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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	6.11	7.33	6.48	7.65	7.96	8.14	9.36	8.50	9.67	9.99
	3H	7.66	8.74	8.04	9.07	9.44	10.11	11.20	10.49	11.53	11.89
	4H	8.21	9.22	8.62	9.58	9.96	11.03	12.04	11.43	12.39	12.77
	6H	8.77	9.70	9.18	10.07	10.46	11.91	12.84	12.33	13.22	13.61
	8H	9.06	9.94	9.49	10.33	10.74	12.32	13.20	12.75	13.59	14.00
	12H	9.42	10.26	9.85	10.64	11.07	12.76	13.60	13.19	13.98	14.41
4H	2H	7.30	8.32	7.71	8.67	9.05	8.76	9.77	9.17	10.12	10.51
	3H	9.50	10.34	9.92	10.74	11.15	11.00	11.84	11.42	12.24	12.65
	4H	10.56	11.31	10.99	11.73	12.17	12.08	12.82	12.51	13.24	13.69
	6H	11.45	12.10	11.92	12.55	13.02	13.19	13.84	13.65	14.29	14.75
	8H	11.84	12.44	12.31	12.89	13.36	13.71	14.32	14.18	14.77	15.24
	12H	12.26	12.79	12.75	13.28	13.75	14.29	14.82	14.77	15.31	15.78
8H	4H	11.36	11.96	11.83	12.41	12.88	12.57	13.17	13.04	13.62	14.09
	6H	12.74	13.24	13.25	13.74	14.22	13.97	14.47	14.47	14.96	15.45
	8H	13.46	13.91	13.99	14.43	14.92	14.71	15.16	15.23	15.67	16.17
	12H	14.21	14.61	14.73	15.10	15.68	15.54	15.93	16.06	16.43	17.00
12H	4H	11.52	12.06	12.01	12.54	13.02	12.67	13.20	13.16	13.69	14.16
	6H	13.08	13.52	13.60	14.04	14.53	14.19	14.63	14.71	15.15	15.64
	8H	13.99	14.39	14.51	14.88	15.46	15.08	15.47	15.59	15.97	16.54