

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: P1059388

Luminaire Tested: S123RDRP-S775D935-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059388
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-28)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S775D935-X4F0-XX-UDD-WVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

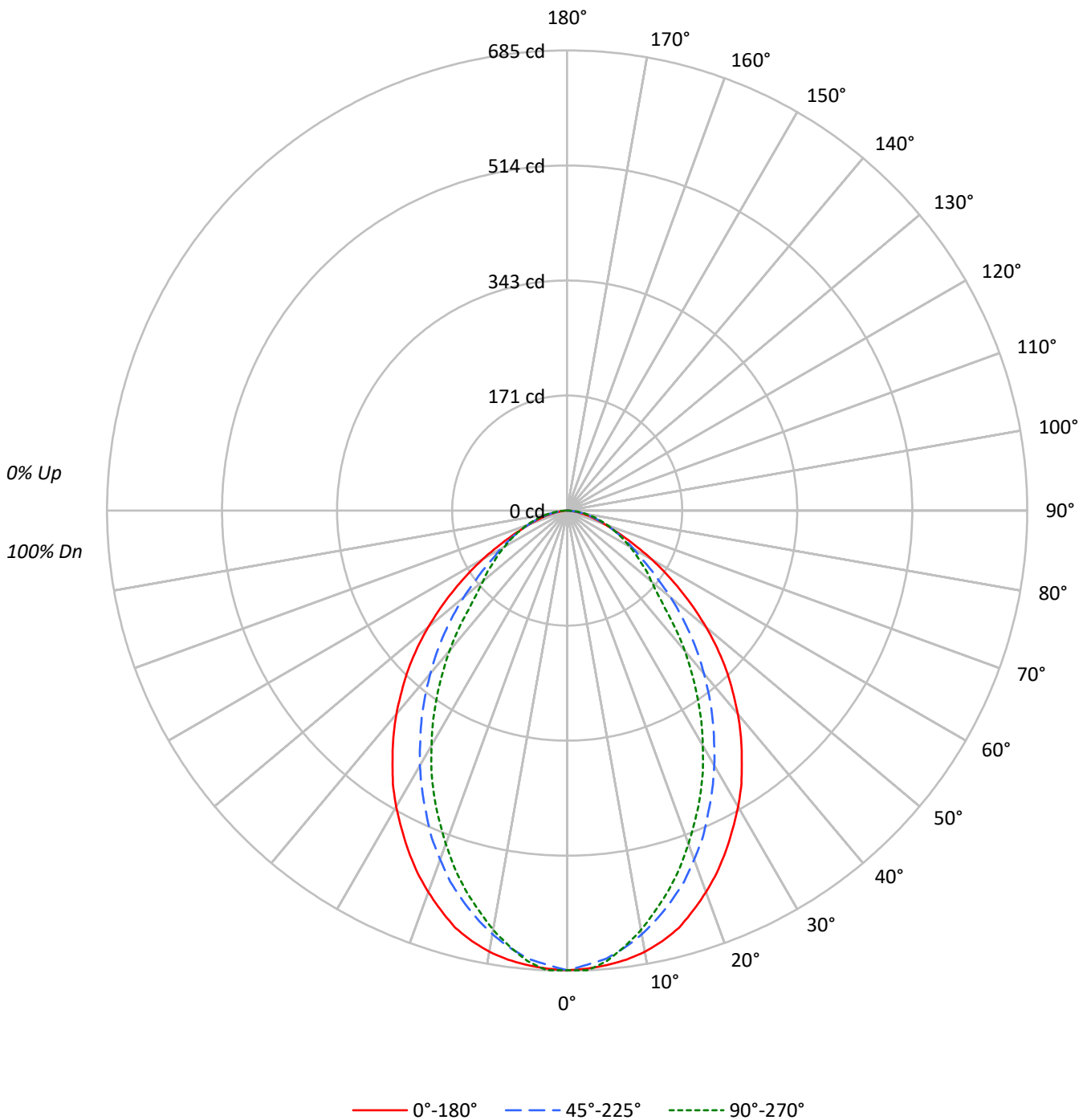
Lumens per Lamp: N/A
Luminaire Lumens: 1196.6 lumens
Efficiency: N/A
Efficacy: 46.4 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 0.95 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	89	88
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47
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	42	37	61	49	42	37	48	41	37	47	41	37	46	41	37	35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8034	8034	8034
5°	8006	7890	7939
10°	7952	7638	7560
15°	7817	7307	7108
20°	7553	6905	6597
25°	7245	6435	6073
30°	6902	5943	5475
35°	6495	5410	4845
40°	6062	4853	4172
45°	5558	4288	3428
50°	4927	3681	2974
55°	4193	3081	2727
60°	3417	2684	2529
65°	2603	2376	2353
70°	2032	2118	2201
75°	1642	1901	2051
80°	1224	1555	1893
85°	660	997	1657

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5558 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.5	5.3
10°-20°	170.9	14.3
20°-30°	232.3	19.4
30°-40°	240.8	20.1
40°-50°	203.1	17.0
50°-60°	144.2	12.0
60°-70°	88.1	7.4
70°-80°	43.8	3.7
80°-90°	9.9	0.8
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°	466.7	39.0
0°-40°	707.5	59.1
0°-60°	1054.7	88.1
0°-90°	1196.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1196.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	684	684	684	684	684	
5°	679	679	669	674	674	64
15°	643	631	601	590	585	180
25°	559	534	497	479	469	257
35°	453	419	377	351	338	283
45°	335	299	258	223	206	257
55°	205	183	150	137	133	184
65°	94	90	86	86	85	96
75°	36	39	42	44	45	39
85°	5	6	7	11	12	7
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	684.2	684.2	684.2	684.2	684.2
2.5°	682.5	683.3	676.8	684.2	685.0
5°	679.2	679.2	669.4	673.5	673.5
7.5°	674.3	672.6	656.2	656.2	654.6
10°	666.9	662.0	640.6	636.5	634.0
12.5°	656.2	648.0	621.7	614.3	609.3
15°	643.0	630.7	601.1	590.4	584.7
17.5°	624.1	611.8	578.9	564.1	557.5
20°	604.4	586.3	552.6	537.8	527.9
22.5°	583.0	560.0	527.1	509.0	498.3
25°	559.2	534.5	496.7	478.6	468.7
27.5°	533.7	506.5	467.9	447.3	437.5
30°	509.0	477.8	438.3	415.3	403.8
32.5°	482.7	447.3	407.0	383.2	371.7
35°	453.1	418.6	377.4	351.1	338.0
37.5°	425.1	389.8	347.0	319.1	304.3
40°	395.5	360.2	316.6	287.8	272.2
42.5°	364.3	330.6	287.8	254.1	239.3
45°	334.7	299.3	258.2	222.8	206.4
47.5°	302.6	269.7	229.4	193.2	181.7
50°	269.7	239.3	201.5	168.6	162.8
52.5°	237.6	212.2	173.5	152.1	149.7
55°	204.8	183.4	150.5	137.3	133.2
57.5°	174.3	158.7	129.1	122.5	120.9
60°	145.5	132.4	114.3	110.2	107.7
62.5°	117.6	110.2	99.5	97.9	96.2
65°	93.7	90.5	85.5	85.5	84.7
67.5°	74.0	74.0	73.2	74.8	74.0
70°	59.2	60.0	61.7	63.3	64.1
72.5°	46.9	49.3	51.0	53.4	54.3
75°	36.2	38.6	41.9	43.6	45.2
77.5°	26.3	28.8	32.1	34.5	36.2
80°	18.1	19.7	23.0	26.3	28.0
82.5°	11.5	12.3	14.8	18.1	19.7
85°	4.9	5.8	7.4	10.7	12.3
87.5°	0.0	0.0	0.8	3.3	5.8
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	16.05	17.50	16.41	17.81	18.13	14.14	15.59	14.51	15.91	16.22
	3H	16.94	18.24	17.32	18.57	18.93	15.72	17.01	16.10	17.34	17.70
	4H	17.23	18.44	17.63	18.79	19.17	16.31	17.52	16.71	17.87	18.25
	6H	17.38	18.49	17.79	18.86	19.26	16.76	17.88	17.18	18.25	18.64
	8H	17.40	18.46	17.83	18.85	19.26	16.91	17.98	17.34	18.37	18.77
	12H	17.39	18.41	17.82	18.79	19.22	17.01	18.03	17.44	18.41	18.84
4H	2H	16.29	17.50	16.69	17.85	18.23	14.69	15.90	15.09	16.25	16.63
	3H	17.40	18.41	17.82	18.81	19.21	16.46	17.46	16.87	17.86	18.26
	4H	17.79	18.69	18.23	19.11	19.55	17.17	18.07	17.60	18.49	18.93
	6H	18.04	18.81	18.50	19.26	19.72	17.74	18.52	18.20	18.97	19.43
	8H	18.08	18.81	18.54	19.25	19.72	17.93	18.66	18.40	19.11	19.58
	12H	18.09	18.73	18.57	19.21	19.69	18.07	18.72	18.56	19.20	19.67
8H	4H	17.95	18.68	18.42	19.13	19.59	17.38	18.11	17.85	18.55	19.02
	6H	18.26	18.86	18.76	19.36	19.84	18.06	18.65	18.56	19.15	19.63
	8H	18.34	18.88	18.86	19.39	19.88	18.31	18.85	18.83	19.36	19.85
	12H	18.38	18.85	18.89	19.34	19.91	18.52	19.00	19.03	19.49	20.06
12H	4H	17.96	18.60	18.44	19.08	19.56	17.38	18.03	17.86	18.51	18.98
	6H	18.28	18.82	18.80	19.33	19.82	18.06	18.60	18.58	19.11	19.60
	8H	18.39	18.87	18.91	19.36	19.93	18.37	18.84	18.88	19.34	19.90