

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: P1059506

Luminaire Tested: S123RDRP-H1165D835-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059506
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-67)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-H1165D835-X4F0-XX-UDD-WVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

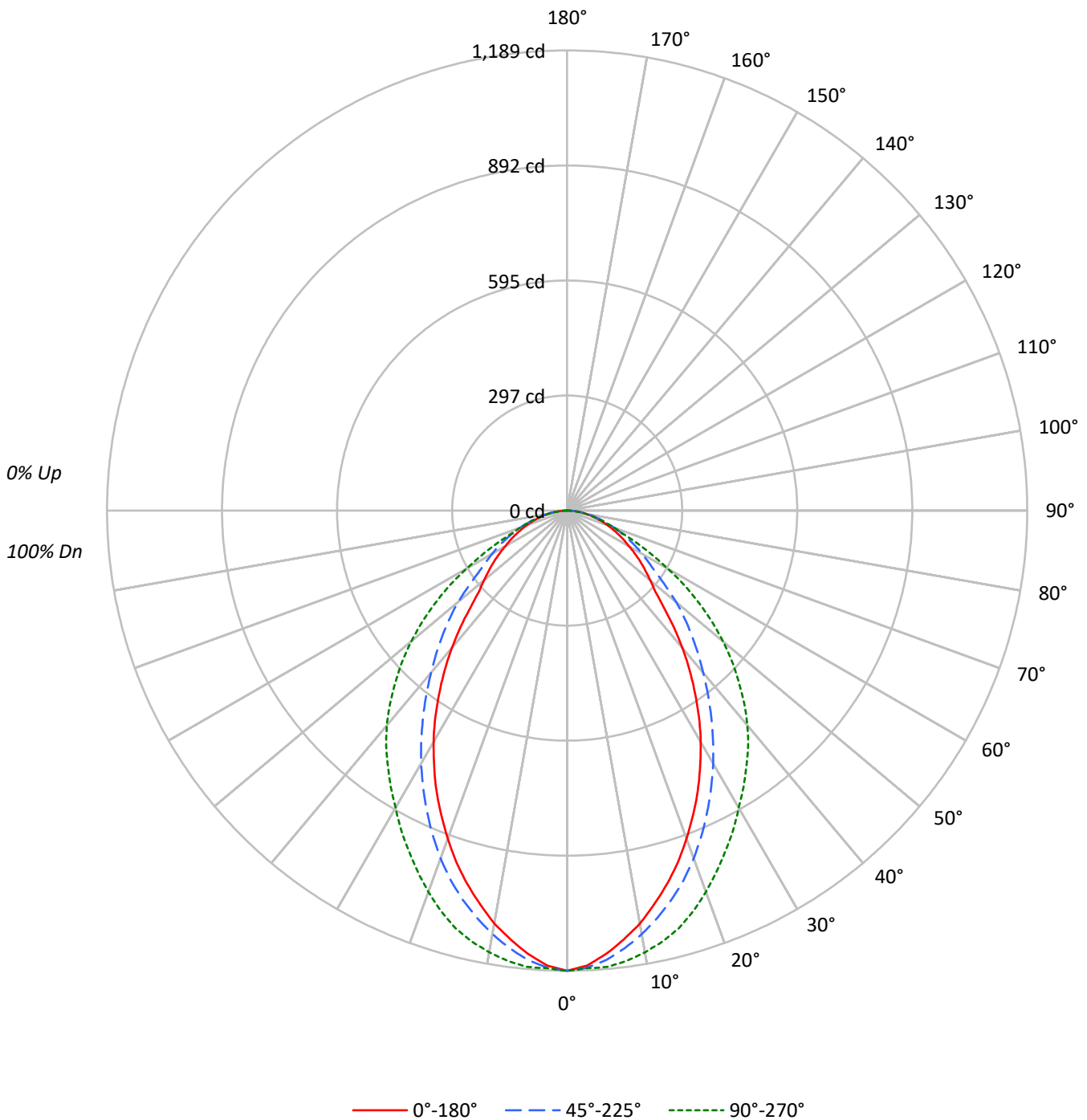
Lumens per Lamp: N/A
Luminaire Lumens: 2148.2 lumens
Efficiency: N/A
Efficacy: 58.9 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.12 / 1.1
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 36.5
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	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89					87				
2	102	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77					75				
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67					65				
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59					57				
5	80	69	60	54	78	68	60	54	66	59	54	64	58	53	62	57	53					51				
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47					45				
7	70	57	49	44	68	56	49	43	55	48	43	54	47	43	52	47	43					41				
8	65	53	45	39	64	52	45	39	51	44	39	50	43	39	48	43	39					37				
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	39	35					34				
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33					31				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13964	13964	13964
5°	13558	13738	13951
10°	12917	13249	13815
15°	12135	12660	13575
20°	11271	11951	13101
25°	10351	11109	12553
30°	9357	10226	12023
35°	8254	9293	11571
40°	7096	8377	11113
45°	5834	7548	10419
50°	5119	6724	9602
55°	4737	5736	8506
60°	4354	5272	7038
65°	4068	4843	5540
70°	3828	4405	4405
75°	3607	4047	3797
80°	3395	3679	3205
85°	3193	3570	2439

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10419 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.0	5.1
10°-20°	294.8	13.7
20°-30°	399.7	18.6
30°-40°	417.9	19.5
40°-50°	362.4	16.9
50°-60°	269.6	12.6
60°-70°	173.0	8.1
70°-80°	92.8	4.3
80°-90°	28.0	1.3
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°	804.4	37.4
0°-40°	1222.3	56.9
0°-60°	1854.4	86.3
0°-90°	2148.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2148.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1189	1189	1189	1189	1189	
5°	1150	1170	1166	1174	1184	108
15°	998	1022	1041	1083	1117	280
25°	799	824	857	915	969	366
35°	576	604	648	730	807	359
45°	351	378	454	552	627	276
55°	231	237	280	360	416	207
65°	146	159	174	185	199	146
75°	80	92	89	85	84	84
85°	24	29	26	22	18	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1189.2	1189.2	1189.2	1189.2	1189.2
2.5°	1176.7	1193.4	1182.3	1182.3	1183.6
5°	1150.2	1169.7	1165.5	1173.9	1183.6
7.5°	1118.1	1139.0	1140.4	1159.9	1173.9
10°	1083.3	1104.2	1111.2	1139.0	1158.6
12.5°	1041.4	1065.1	1077.7	1112.5	1140.4
15°	998.2	1021.9	1041.4	1083.3	1116.7
17.5°	952.2	975.9	1001.0	1048.4	1084.7
20°	902.0	927.1	956.4	1003.8	1048.4
22.5°	850.4	876.9	907.6	959.2	1009.4
25°	798.9	824.0	857.4	914.6	968.9
27.5°	744.5	771.0	805.8	868.6	929.9
30°	690.1	716.6	754.2	821.2	886.7
32.5°	634.3	660.8	701.3	776.6	847.7
35°	575.8	603.7	648.3	730.5	807.2
37.5°	520.0	546.5	596.7	687.3	768.2
40°	462.9	490.7	546.5	644.1	725.0
42.5°	407.1	435.0	500.5	598.1	677.6
45°	351.3	377.8	454.5	552.1	627.4
47.5°	308.1	327.6	411.3	503.3	578.6
50°	280.2	287.2	368.1	455.9	525.6
52.5°	255.1	260.7	320.7	408.5	471.2
55°	231.4	237.0	280.2	359.7	415.5
57.5°	207.7	214.7	249.6	309.5	359.7
60°	185.4	193.8	224.5	264.9	299.7
62.5°	165.9	175.7	199.4	224.5	248.2
65°	146.4	158.9	174.3	185.4	199.4
67.5°	128.3	142.2	150.6	153.4	154.8
70°	111.5	125.5	128.3	128.3	128.3
72.5°	94.8	110.1	107.4	106.0	104.6
75°	79.5	92.0	89.2	85.0	83.7
77.5°	64.1	75.3	71.1	68.3	64.1
80°	50.2	58.6	54.4	51.6	47.4
82.5°	37.6	43.2	39.0	36.2	32.1
85°	23.7	29.3	26.5	22.3	18.1
87.5°	12.5	16.7	13.9	12.5	7.0
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	15.95	17.43	16.31	17.74	18.06	18.70	20.19	19.07	20.50	20.81
	3H	17.66	18.98	18.03	19.31	19.68	19.72	21.05	20.10	21.38	21.74
	4H	18.32	19.56	18.72	19.91	20.29	20.09	21.33	20.49	21.68	22.06
	6H	18.82	19.97	19.23	20.33	20.73	20.34	21.49	20.76	21.86	22.25
	8H	19.00	20.09	19.42	20.48	20.88	20.41	21.51	20.84	21.90	22.30
	12H	19.12	20.17	19.55	20.55	20.98	20.45	21.50	20.88	21.88	22.31
4H	2H	16.72	17.97	17.12	18.32	18.70	18.97	20.22	19.37	20.57	20.95
	3H	18.65	19.68	19.06	20.08	20.48	20.23	21.26	20.64	21.66	22.06
	4H	19.46	20.39	19.89	20.80	21.24	20.72	21.64	21.15	22.06	22.50
	6H	20.10	20.91	20.56	21.35	21.81	21.10	21.90	21.55	22.35	22.81
	8H	20.33	21.08	20.79	21.53	21.99	21.21	21.96	21.67	22.41	22.88
	12H	20.50	21.17	20.98	21.65	22.12	21.28	21.95	21.76	22.43	22.90
8H	4H	19.78	20.53	20.24	20.98	21.44	20.91	21.66	21.37	22.11	22.57
	6H	20.57	21.19	21.07	21.69	22.16	21.39	22.02	21.89	22.51	22.99
	8H	20.90	21.46	21.41	21.97	22.46	21.57	22.13	22.08	22.64	23.13
	12H	21.18	21.67	21.69	22.16	22.73	21.70	22.20	22.21	22.69	23.26
12H	4H	19.80	20.48	20.28	20.95	21.43	20.92	21.60	21.40	22.07	22.55
	6H	20.62	21.19	21.14	21.70	22.18	21.43	21.99	21.95	22.50	22.99
	8H	21.02	21.51	21.53	22.01	22.57	21.66	22.16	22.17	22.65	23.21