

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: P1175366

Luminaire Tested: S125RDRP-S375D835-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2024
Report Number: P1175366
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-82)
Test Lab: INNOVATION CENTER
Issue Date: 8/18/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S375D835-X4F0-XX-UDD-WVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

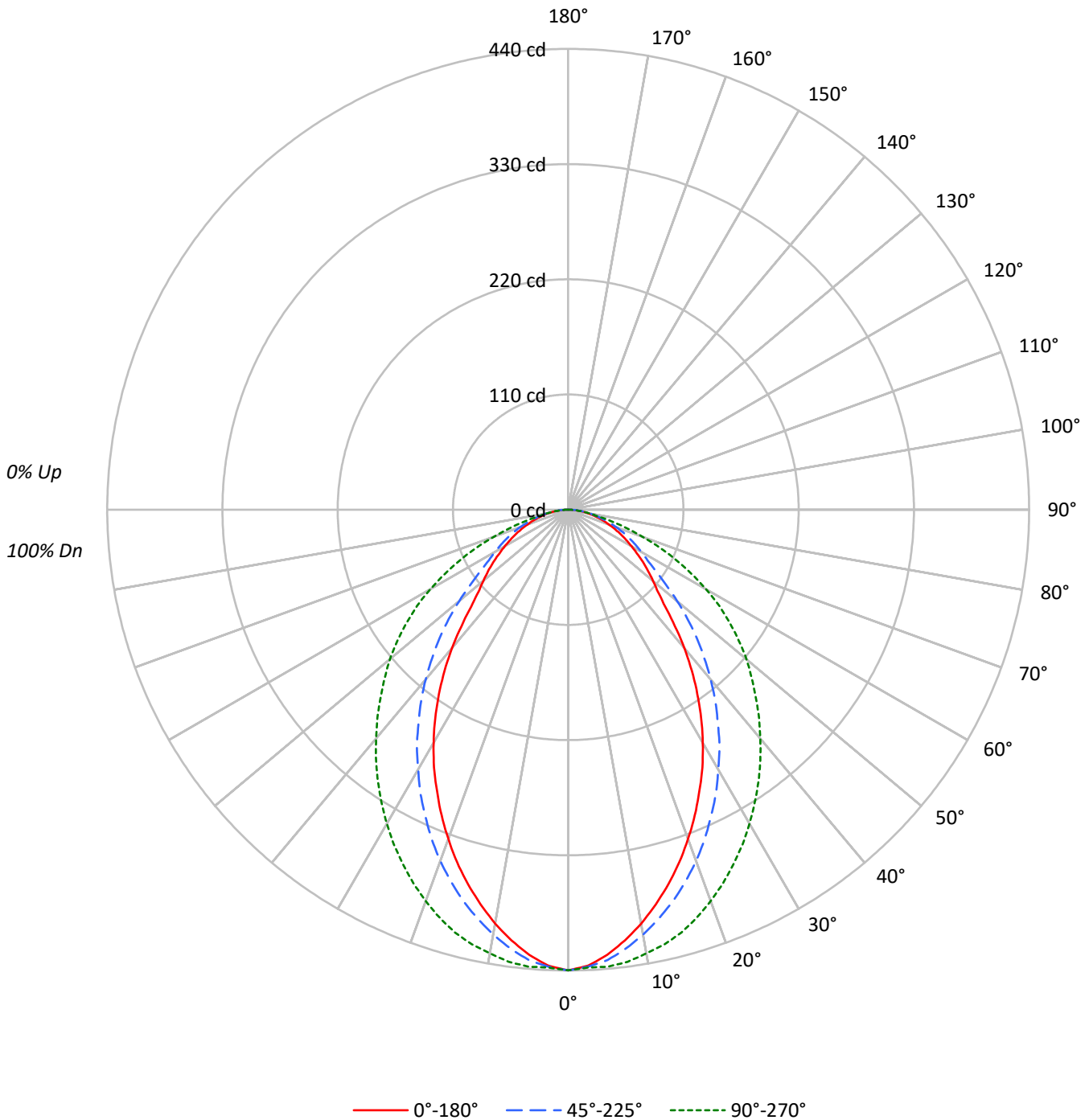
Lumens per Lamp: N/A
Luminaire Lumens: 828.5 lumens
Efficiency: N/A
Efficacy: 66.3 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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

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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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3028	3028	3028
5°	2949	2983	3027
10°	2806	2879	3007
15°	2637	2757	2978
20°	2451	2615	2913
25°	2252	2451	2836
30°	2042	2276	2752
35°	1807	2093	2661
40°	1550	1903	2563
45°	1273	1694	2464
50°	1132	1456	2379
55°	1044	1218	2259
60°	961	1110	2092
65°	894	1046	1849
70°	833	976	1510
75°	785	904	1133
80°	741	829	813
85°	679	829	679

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2464 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.7	4.9
10°-20°	109.7	13.2
20°-30°	151.0	18.2
30°-40°	160.1	19.3
40°-50°	140.2	16.9
50°-60°	107.5	13.0
60°-70°	71.6	8.6
70°-80°	36.7	4.4
80°-90°	10.9	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°	301.4	36.4
0°-40°	461.6	55.7
0°-60°	709.3	85.6
0°-90°	828.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	828.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	440	440	440	440	440	
5°	427	432	432	435	438	40
15°	370	379	387	405	418	104
25°	296	306	323	350	373	136
35°	215	225	249	286	317	134
45°	131	142	174	217	253	103
55°	87	89	102	151	188	78
65°	55	55	64	84	114	55
75°	30	31	34	36	43	31
85°	9	10	10	10	9	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	439.8	439.8	439.8	439.8	439.8
2.5°	435.7	440.2	436.8	437.2	437.5
5°	426.7	432.3	431.6	434.6	437.9
7.5°	414.8	420.7	422.6	430.1	435.3
10°	401.3	408.1	411.8	423.0	430.1
12.5°	386.0	393.9	399.8	414.4	424.9
15°	370.0	378.6	386.8	405.1	417.8
17.5°	352.8	361.4	372.2	393.1	408.4
20°	334.5	343.8	356.9	379.3	397.6
22.5°	315.8	325.5	340.5	365.1	386.0
25°	296.4	306.5	322.6	349.8	373.3
27.5°	277.4	286.7	305.4	334.5	360.3
30°	256.9	266.6	286.3	318.5	346.1
32.5°	236.3	246.0	268.8	302.4	331.5
35°	215.0	225.1	249.0	285.6	316.6
37.5°	193.8	204.2	230.7	268.4	301.3
40°	172.5	183.7	211.7	251.3	285.2
42.5°	150.8	162.8	192.3	234.5	269.5
45°	130.7	141.5	174.0	217.3	253.1
47.5°	116.1	122.5	154.6	199.7	237.4
50°	105.7	108.6	135.9	182.9	222.1
52.5°	96.3	98.2	117.6	167.3	205.3
55°	87.0	88.9	101.5	150.8	188.2
57.5°	78.0	79.1	89.6	134.4	171.0
60°	69.8	70.6	80.6	118.0	151.9
62.5°	62.3	62.7	72.1	101.2	132.9
65°	54.9	55.3	64.2	84.4	113.5
67.5°	48.2	48.2	56.7	69.1	94.8
70°	41.4	41.4	48.5	56.0	75.0
72.5°	35.5	36.2	41.1	45.2	58.6
75°	29.5	31.4	34.0	35.8	42.6
77.5°	23.9	26.1	27.3	28.0	28.4
80°	18.7	20.2	20.9	21.3	20.5
82.5°	13.8	14.9	15.3	15.3	14.2
85°	8.6	9.7	10.5	10.1	8.6
87.5°	4.1	5.6	6.0	5.2	4.1
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	10.46	11.96	10.83	12.27	12.59	14.49	15.99	14.85	16.30	16.62
	3H	12.05	13.39	12.43	13.72	14.08	15.88	17.22	16.25	17.55	17.91
	4H	12.69	13.95	13.09	14.30	14.68	16.28	17.54	16.68	17.89	18.27
	6H	13.20	14.37	13.62	14.74	15.13	16.49	17.65	16.90	18.02	18.41
	8H	13.38	14.49	13.81	14.88	15.28	16.55	17.65	16.97	18.04	18.45
	12H	13.51	14.57	13.94	14.95	15.38	16.58	17.64	17.01	18.02	18.45
4H	2H	11.23	12.49	11.63	12.84	13.22	14.62	15.88	15.02	16.23	16.61
	3H	13.01	14.06	13.43	14.46	14.86	16.19	17.24	16.60	17.64	18.04
	4H	13.78	14.73	14.22	15.14	15.58	16.70	17.64	17.13	18.06	18.50
	6H	14.42	15.24	14.88	15.69	16.15	17.03	17.84	17.48	18.29	18.75
	8H	14.65	15.42	15.12	15.86	16.33	17.12	17.89	17.59	18.33	18.80
	12H	14.83	15.51	15.31	15.99	16.46	17.20	17.88	17.68	18.36	18.83
8H	4H	14.17	14.93	14.63	15.38	15.85	16.80	17.56	17.26	18.01	18.48
	6H	14.95	15.58	15.44	16.07	16.55	17.22	17.85	17.72	18.34	18.82
	8H	15.26	15.83	15.78	16.34	16.83	17.38	17.95	17.89	18.46	18.94
	12H	15.52	16.02	16.03	16.52	17.08	17.52	18.02	18.03	18.51	19.08
12H	4H	14.21	14.89	14.69	15.37	15.84	16.80	17.48	17.28	17.96	18.43
	6H	15.02	15.59	15.53	16.10	16.59	17.23	17.80	17.74	18.31	18.80
	8H	15.40	15.91	15.91	16.40	16.96	17.44	17.94	17.95	18.43	19.00