

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: P1059363

Luminaire Tested: S123RDRP-S775D850-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059363
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-64)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S775D850-X4F0-XX-UDD-WVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

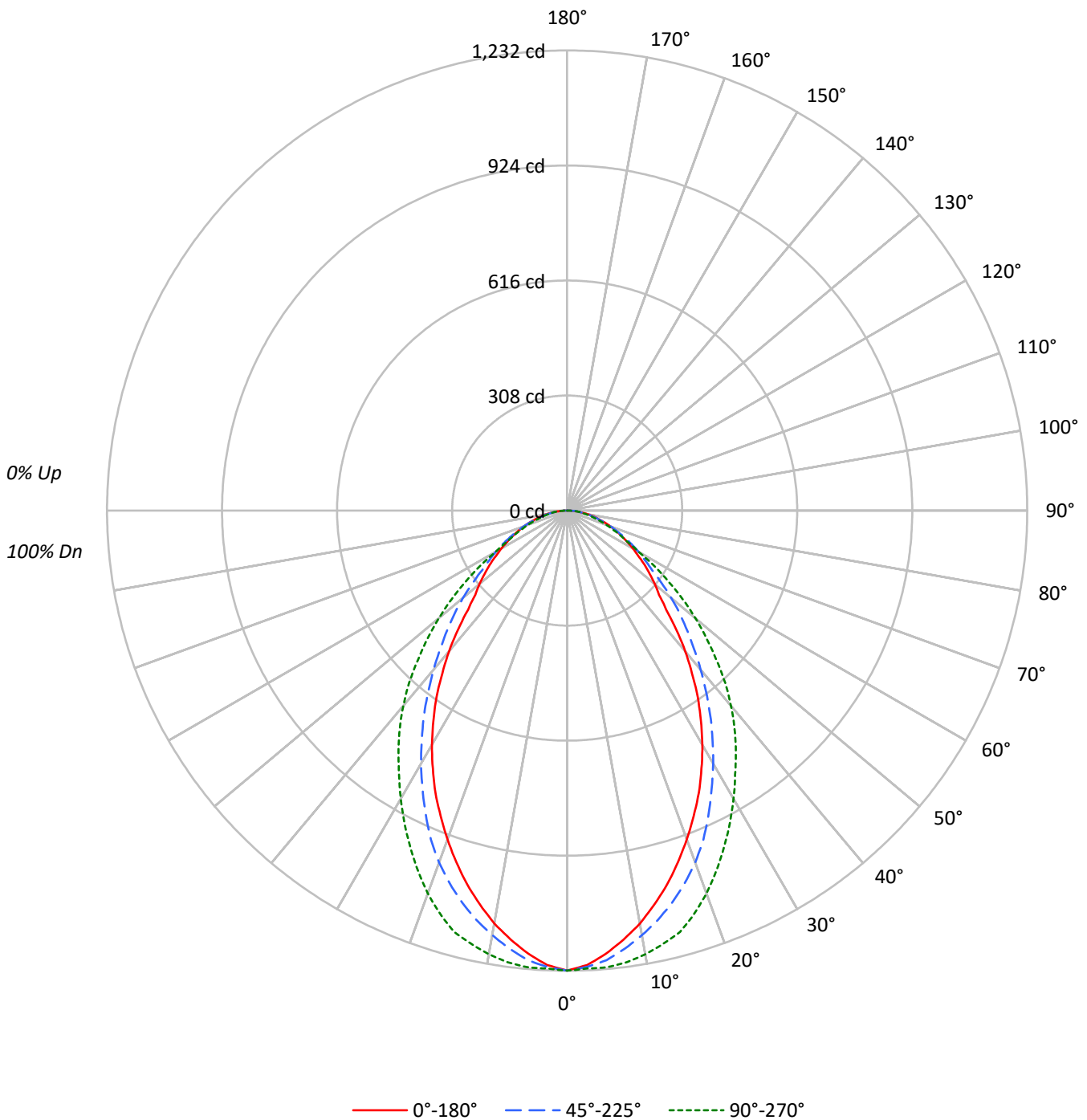
Lumens per Lamp: N/A
Luminaire Lumens: 2164.2 lumens
Efficiency: N/A
Efficacy: 83.9 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.1 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1059363

CATALOG NUMBER: S123RDRP-S775D850-X4F0-XX-UDD-WVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1059363

CATALOG NUMBER: S123RDRP-S775D850-X4F0-XX-UDD-WVL-W

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	108	104	101	97	100	97	94	96	94	92	92	91	89	87
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48	46
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	41
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34
10	58	46	39	34	57	45	38	34	45	38	34	44	38	33	43	37	33	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14462	14462	14462
5°	14042	14243	14467
10°	13383	13762	14382
15°	12588	13207	14199
20°	11708	12530	13628
25°	10807	11618	12881
30°	9815	10606	12086
35°	8736	9571	11289
40°	7539	8529	10463
45°	6231	7551	9381
50°	5595	6661	8190
55°	5186	5685	6791
60°	4779	5178	5202
65°	4446	4682	4359
70°	4185	4257	3821
75°	3943	3797	3366
80°	3726	3442	3151
85°	3570	3853	3570

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9381 cd/sqm

TEST NUMBER: P1059363

CATALOG NUMBER: S123RDRP-S775D850-X4F0-XX-UDD-WVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.1	5.3
10°-20°	307.3	14.2
20°-30°	415.7	19.2
30°-40°	427.2	19.7
40°-50°	358.8	16.6
50°-60°	257.2	11.9
60°-70°	163.8	7.6
70°-80°	90.0	4.2
80°-90°	30.0	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°	837.1	38.7
0°-40°	1264.3	58.4
0°-60°	1880.4	86.9
0°-90°	2164.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2164.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1232	1232	1232	1232	1232	
5°	1191	1212	1208	1217	1227	112
15°	1036	1064	1086	1133	1168	290
25°	834	866	897	945	994	382
35°	609	642	668	727	788	379
45°	375	408	455	520	565	296
55°	253	259	278	315	332	226
65°	160	170	168	159	157	160
75°	87	95	84	77	74	92
85°	26	28	29	30	26	29
90°	0	0	0	0	0	



TEST NUMBER: P1059363

CATALOG NUMBER: S123RDRP-S775D850-X4F0-XX-UDD-WVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1231.6	1231.6	1231.6	1231.6	1231.6
2.5°	1217.8	1234.8	1223.1	1224.2	1227.3
5°	1191.3	1212.5	1208.3	1216.7	1227.3
7.5°	1158.5	1181.8	1182.8	1203.0	1219.9
10°	1122.4	1146.8	1154.2	1185.0	1206.2
12.5°	1080.0	1106.5	1122.4	1160.6	1188.1
15°	1035.5	1064.1	1086.4	1133.0	1168.0
17.5°	986.8	1017.5	1046.1	1095.9	1132.0
20°	936.9	969.8	1002.7	1049.3	1090.6
22.5°	885.0	918.9	952.8	998.4	1044.0
25°	834.1	865.9	896.7	945.4	994.2
27.5°	779.0	811.9	838.4	892.4	943.3
30°	723.9	756.8	782.2	838.4	891.4
32.5°	666.7	700.6	723.9	782.2	837.3
35°	609.4	642.3	667.7	727.1	787.5
37.5°	549.0	585.1	610.5	677.3	736.6
40°	491.8	525.7	556.4	626.4	682.6
42.5°	432.4	467.4	502.4	574.5	626.4
45°	375.2	408.1	454.7	520.4	564.9
47.5°	333.9	355.1	409.1	464.2	506.6
50°	306.3	314.8	364.6	413.4	448.3
52.5°	278.8	285.1	319.0	363.5	390.0
55°	253.3	258.6	277.7	314.8	331.7
57.5°	225.8	231.1	247.0	268.2	277.7
60°	203.5	207.7	220.5	223.6	221.5
62.5°	181.2	187.6	194.0	186.5	183.4
65°	160.0	169.6	168.5	159.0	156.9
67.5°	141.0	150.5	145.2	135.7	132.5
70°	121.9	131.4	124.0	114.5	111.3
72.5°	103.9	114.5	102.8	94.3	92.2
75°	86.9	95.4	83.7	77.4	74.2
77.5°	71.0	77.4	66.8	61.5	59.4
80°	55.1	59.4	50.9	47.7	46.6
82.5°	40.3	42.4	37.1	39.2	38.2
85°	26.5	27.6	28.6	29.7	26.5
87.5°	12.7	18.0	18.0	17.0	13.8
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1059363
 CATALOG NUMBER: S123RDRP-S775D850-X4F0-XX-UDD-WVL-W

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	16.47	17.93	16.83	18.24	18.56	17.54	19.00	17.90	19.31	19.63
	3H	18.16	19.48	18.54	19.80	20.17	18.62	19.93	19.00	20.26	20.62
	4H	18.82	20.05	19.22	20.40	20.78	19.02	20.25	19.42	20.60	20.98
	6H	19.32	20.46	19.73	20.82	21.22	19.33	20.47	19.75	20.83	21.23
	8H	19.49	20.57	19.92	20.96	21.36	19.47	20.55	19.90	20.94	21.34
	12H	19.62	20.65	20.05	21.03	21.46	19.59	20.62	20.02	21.00	21.43
4H	2H	17.07	18.30	17.47	18.65	19.03	17.94	19.17	18.34	19.52	19.90
	3H	19.00	20.01	19.41	20.41	20.82	19.26	20.28	19.67	20.68	21.08
	4H	19.81	20.72	20.24	21.14	21.58	19.78	20.69	20.21	21.11	21.55
	6H	20.46	21.25	20.91	21.70	22.16	20.21	21.01	20.67	21.45	21.91
	8H	20.68	21.42	21.14	21.87	22.34	20.40	21.14	20.86	21.59	22.06
	12H	20.85	21.51	21.33	21.99	22.47	20.58	21.25	21.07	21.73	22.20
8H	4H	20.04	20.79	20.51	21.23	21.70	20.02	20.77	20.49	21.21	21.68
	6H	20.83	21.45	21.33	21.94	22.42	20.57	21.19	21.07	21.68	22.16
	8H	21.15	21.70	21.66	22.21	22.70	20.85	21.40	21.36	21.91	22.40
	12H	21.42	21.90	21.93	22.40	22.96	21.14	21.63	21.65	22.12	22.69
12H	4H	20.06	20.72	20.54	21.20	21.67	20.05	20.71	20.53	21.19	21.66
	6H	20.87	21.42	21.38	21.93	22.42	20.62	21.18	21.14	21.69	22.18
	8H	21.24	21.73	21.75	22.22	22.79	20.96	21.45	21.47	21.95	22.51