

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: P242767

Luminaire Tested: S125DRP-S610D927-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P242767
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-12)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DRP-S610D927-X4F0-XX-UDD-F-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

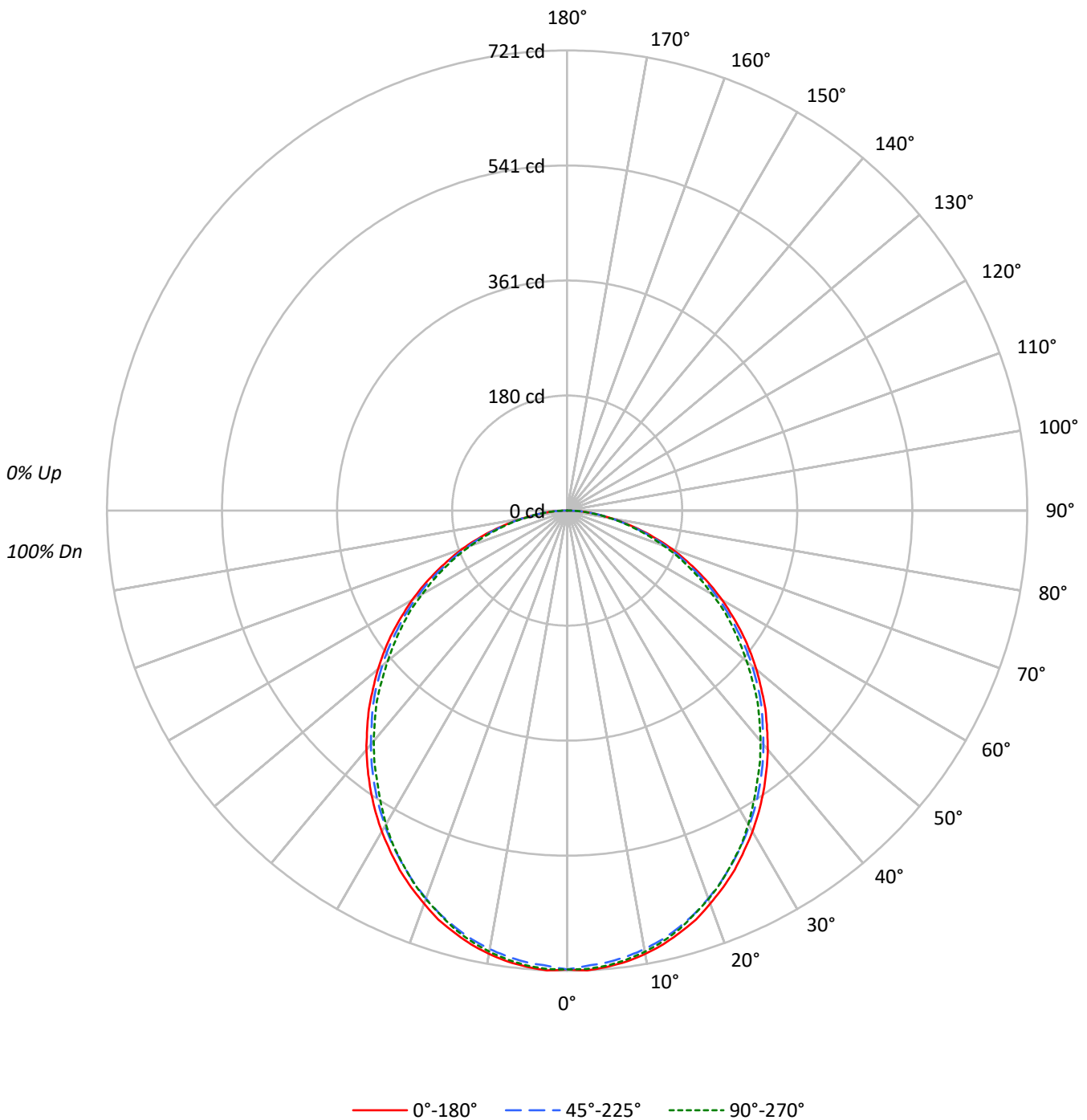
Lumens per Lamp: N/A
Luminaire Lumens: 1871.3 lumens
Efficiency: N/A
Efficacy: 99.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 18.8
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: P242767

CATALOG NUMBER: S125DRP-S610D927-X4F0-XX-UDD-F-W

Luminous Intensity Polar Plot





TEST NUMBER: P242767

CATALOG NUMBER: S125DRP-S610D927-X4F0-XX-UDD-F-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	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5110	5110	5110
5°	5121	5073	5105
10°	5090	5037	5066
15°	5035	4976	4998
20°	4956	4891	4900
25°	4871	4791	4786
30°	4767	4682	4659
35°	4654	4565	4501
40°	4539	4439	4375
45°	4414	4322	4237
50°	4277	4183	4057
55°	4145	4025	3912
60°	3986	3865	3727
65°	3797	3673	3548
70°	3618	3452	3333
75°	3295	3185	3078
80°	2935	2886	2816
85°	2552	2601	2455

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4414 cd/sqm



TEST NUMBER: P242767

CATALOG NUMBER: S125DRP-S610D927-X4F0-XX-UDD-F-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.8	3.6
10°-20°	191.6	10.2
20°-30°	282.9	15.1
30°-40°	330.1	17.6
40°-50°	331.5	17.7
50°-60°	291.0	15.6
60°-70°	216.8	11.6
70°-80°	123.8	6.6
80°-90°	35.8	1.9
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°	542.4	29.0
0°-40°	872.5	46.6
0°-60°	1495.0	79.9
0°-90°	1871.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1871.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	719	719	719	719	719	
5°	718	717	711	716	716	68
15°	684	683	676	679	679	193
25°	621	618	611	612	610	286
35°	536	534	526	523	519	336
45°	439	437	430	423	422	338
55°	334	333	325	320	316	299
65°	226	225	218	213	211	224
75°	120	119	116	114	112	128
85°	31	32	32	31	30	36
90°	0	0	0	0	0	



TEST NUMBER: P242767

CATALOG NUMBER: S125DRP-S610D927-X4F0-XX-UDD-F-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	719.0	719.0	719.0	719.0	719.0
2.5°	721.2	719.5	713.9	719.5	719.0
5°	717.8	716.7	711.0	716.1	715.6
7.5°	712.7	711.6	705.3	710.4	709.9
10°	705.3	704.2	697.9	702.5	701.9
12.5°	696.2	693.9	688.3	691.7	691.7
15°	684.3	682.6	676.3	679.2	679.2
17.5°	671.8	668.9	662.7	666.1	663.2
20°	655.3	654.1	646.7	650.7	647.9
22.5°	638.8	636.5	629.7	631.9	630.2
25°	621.1	618.3	610.9	612.0	610.3
27.5°	600.7	599.0	591.6	592.1	590.4
30°	580.8	579.0	570.5	569.4	567.7
32.5°	559.1	556.3	548.9	546.6	543.2
35°	536.4	534.1	526.1	523.3	518.8
37.5°	513.1	510.2	502.8	498.8	496.0
40°	489.2	486.3	478.4	473.2	471.5
42.5°	463.6	461.3	453.3	448.8	445.9
45°	439.1	436.8	430.0	423.2	421.5
47.5°	412.4	413.0	404.4	397.6	393.6
50°	386.8	385.1	378.3	370.9	366.9
52.5°	360.6	359.5	352.1	345.8	341.3
55°	334.5	332.8	324.8	319.7	315.7
57.5°	306.6	306.0	299.2	292.4	290.7
60°	280.4	278.1	271.9	266.2	262.2
62.5°	253.1	251.4	246.3	240.0	237.2
65°	225.8	224.7	218.4	213.3	211.0
67.5°	199.1	196.8	192.3	187.7	186.6
70°	174.1	171.2	166.1	162.7	160.4
72.5°	146.8	145.0	142.2	138.2	135.9
75°	120.0	118.9	116.0	114.3	112.1
77.5°	95.0	94.4	92.7	91.6	89.9
80°	71.7	71.7	70.5	70.0	68.8
82.5°	51.2	50.1	50.1	48.9	48.9
85°	31.3	31.9	31.9	31.3	30.1
87.5°	15.4	15.4	14.8	14.8	13.7
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P242767

CATALOG NUMBER: S125DRP-S610D927-X4F0-XX-UDD-F-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	17.02	18.63	17.38	18.95	19.26	16.69	18.31	17.05	18.62	18.94
	3H	18.79	20.25	19.16	20.58	20.94	18.42	19.88	18.80	20.21	20.57
	4H	19.44	20.82	19.84	21.17	21.54	19.07	20.44	19.47	20.79	21.17
	6H	19.92	21.20	20.33	21.56	21.95	19.55	20.83	19.96	21.19	21.59
	8H	20.08	21.30	20.50	21.68	22.08	19.72	20.93	20.14	21.32	21.72
	12H	20.18	21.35	20.61	21.73	22.16	19.83	20.99	20.25	21.37	21.80
4H	2H	17.59	18.97	17.99	19.32	19.70	17.34	18.71	17.73	19.06	19.44
	3H	19.59	20.74	20.00	21.14	21.54	19.29	20.44	19.70	20.84	21.24
	4H	20.38	21.42	20.81	21.83	22.27	20.06	21.11	20.49	21.52	21.96
	6H	20.98	21.90	21.44	22.34	22.79	20.68	21.59	21.13	22.03	22.49
	8H	21.19	22.04	21.65	22.49	22.95	20.89	21.74	21.35	22.18	22.65
	12H	21.34	22.11	21.82	22.59	23.06	21.04	21.81	21.52	22.28	22.75
8H	4H	20.66	21.52	21.12	21.96	22.42	20.39	21.24	20.85	21.68	22.15
	6H	21.39	22.10	21.89	22.59	23.07	21.13	21.84	21.62	22.32	22.80
	8H	21.67	22.31	22.18	22.82	23.30	21.41	22.05	21.92	22.55	23.04
	12H	21.90	22.47	22.41	22.96	23.52	21.64	22.21	22.15	22.70	23.26
12H	4H	20.69	21.46	21.17	21.94	22.41	20.42	21.19	20.90	21.67	22.13
	6H	21.44	22.08	21.95	22.59	23.08	21.19	21.83	21.70	22.33	22.82
	8H	21.78	22.35	22.29	22.84	23.40	21.53	22.09	22.04	22.58	23.14