

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: P242786

Luminaire Tested: S125DRP-S610D930-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P242786
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-S610D930-X4F0-XX-UDD-F-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

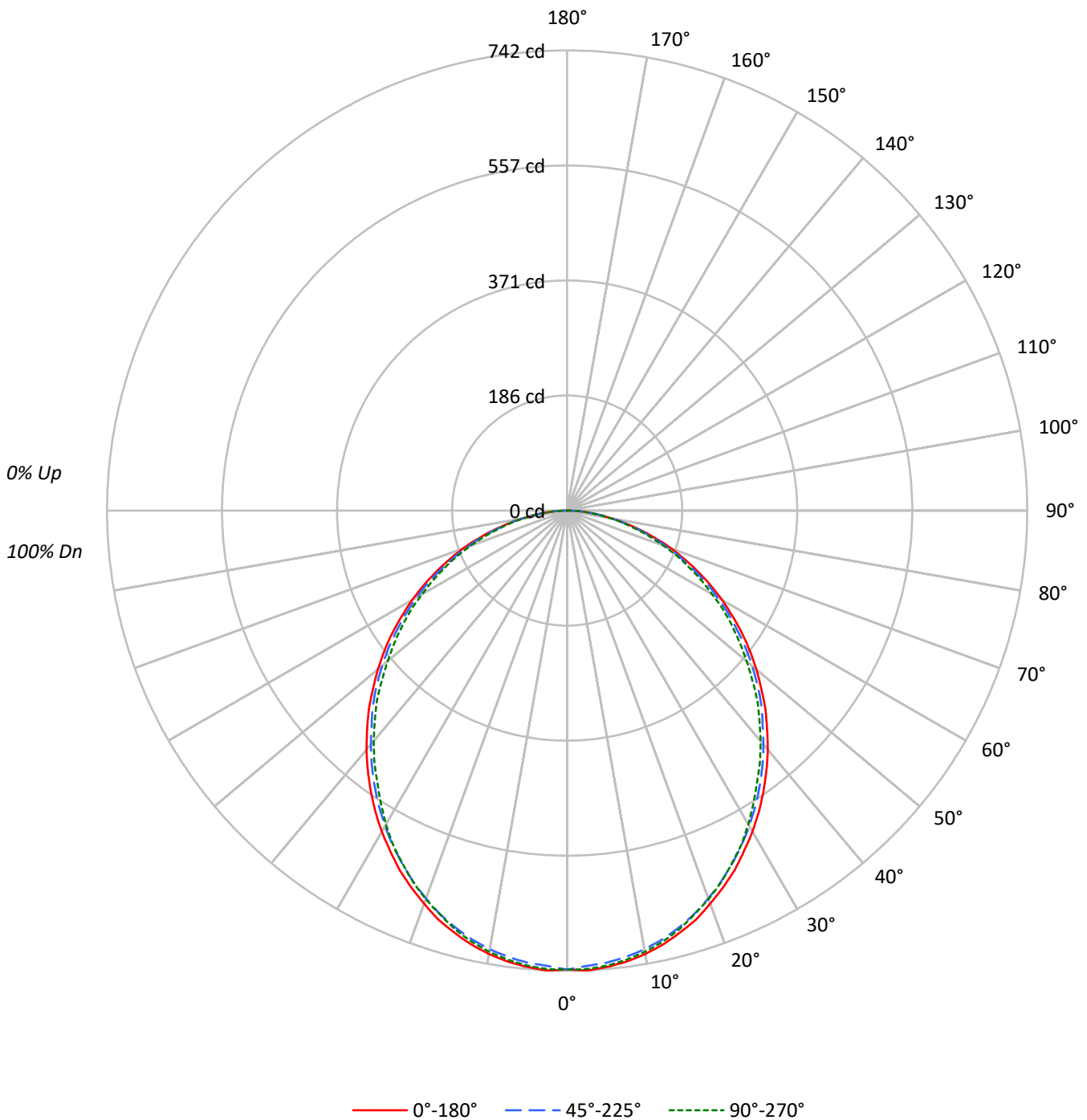
Lumens per Lamp: N/A
Luminaire Lumens: 1925.9 lumens
Efficiency: N/A
Efficacy: 102.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

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: P242786

CATALOG NUMBER: S125DRP-S610D930-X4F0-XX-UDD-F-W

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	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°	5259	5259	5259
5°	5271	5221	5254
10°	5239	5184	5214
15°	5182	5121	5143
20°	5101	5034	5043
25°	5013	4930	4926
30°	4905	4819	4794
35°	4789	4698	4632
40°	4671	4568	4503
45°	4542	4449	4360
50°	4402	4305	4175
55°	4265	4142	4026
60°	4102	3977	3837
65°	3908	3781	3653
70°	3722	3551	3431
75°	3391	3279	3166
80°	3021	2971	2898
85°	2626	2675	2528

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4542 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.8	3.6
10°-20°	197.2	10.2
20°-30°	291.2	15.1
30°-40°	339.7	17.6
40°-50°	341.2	17.7
50°-60°	299.5	15.6
60°-70°	223.1	11.6
70°-80°	127.4	6.6
80°-90°	36.8	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°	558.2	29.0
0°-40°	897.9	46.6
0°-60°	1538.6	79.9
0°-90°	1925.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1925.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	740	740	740	740	740	
5°	739	738	732	737	736	70
15°	704	702	696	699	699	199
25°	639	636	629	630	628	294
35°	552	550	542	539	534	345
45°	452	450	443	436	434	348
55°	344	342	334	329	325	307
65°	232	231	225	220	217	230
75°	124	122	119	118	115	131
85°	32	33	33	32	31	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	740.0	740.0	740.0	740.0	740.0
2.5°	742.3	740.5	734.7	740.5	740.0
5°	738.8	737.6	731.8	737.0	736.4
7.5°	733.5	732.3	725.9	731.2	730.6
10°	725.9	724.7	718.3	723.0	722.4
12.5°	716.5	714.2	708.3	711.9	711.9
15°	704.2	702.5	696.0	699.0	699.0
17.5°	691.4	688.4	682.0	685.5	682.6
20°	674.4	673.2	665.6	669.7	666.8
22.5°	657.4	655.1	648.0	650.4	648.6
25°	639.3	636.3	628.7	629.9	628.1
27.5°	618.2	616.4	608.8	609.4	607.7
30°	597.7	595.9	587.2	586.0	584.2
32.5°	575.5	572.5	564.9	562.6	559.1
35°	552.0	549.7	541.5	538.6	533.9
37.5°	528.0	525.1	517.5	513.4	510.5
40°	503.4	500.5	492.3	487.1	485.3
42.5°	477.1	474.8	466.6	461.9	459.0
45°	451.9	449.6	442.6	435.5	433.8
47.5°	424.4	425.0	416.2	409.2	405.1
50°	398.1	396.3	389.3	381.7	377.6
52.5°	371.1	370.0	362.4	355.9	351.2
55°	344.2	342.5	334.3	329.0	324.9
57.5°	315.5	314.9	307.9	300.9	299.1
60°	288.6	286.3	279.8	274.0	269.9
62.5°	260.5	258.7	253.5	247.0	244.1
65°	232.4	231.2	224.8	219.5	217.2
67.5°	204.9	202.6	197.9	193.2	192.0
70°	179.1	176.2	170.9	167.4	165.1
72.5°	151.0	149.3	146.4	142.3	139.9
75°	123.5	122.3	119.4	117.7	115.3
77.5°	97.8	97.2	95.4	94.3	92.5
80°	73.8	73.8	72.6	72.0	70.8
82.5°	52.7	51.5	51.5	50.3	50.3
85°	32.2	32.8	32.8	32.2	31.0
87.5°	15.8	15.8	15.2	15.2	14.0
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	17.12	18.73	17.48	19.05	19.36	16.79	18.41	17.15	18.72	19.04
	3H	18.89	20.35	19.26	20.67	21.04	18.52	19.98	18.90	20.31	20.67
	4H	19.54	20.92	19.94	21.27	21.64	19.17	20.54	19.57	20.89	21.27
	6H	20.02	21.30	20.43	21.66	22.05	19.65	20.93	20.06	21.29	21.69
	8H	20.18	21.40	20.60	21.78	22.18	19.81	21.03	20.24	21.42	21.82
	12H	20.28	21.45	20.71	21.83	22.26	19.92	21.09	20.35	21.47	21.90
4H	2H	17.69	19.07	18.09	19.42	19.80	17.44	18.81	17.83	19.16	19.54
	3H	19.69	20.84	20.10	21.24	21.64	19.39	20.54	19.80	20.94	21.34
	4H	20.48	21.52	20.91	21.93	22.37	20.16	21.21	20.59	21.62	22.06
	6H	21.08	22.00	21.54	22.44	22.89	20.78	21.69	21.23	22.13	22.59
	8H	21.29	22.14	21.75	22.59	23.05	20.99	21.84	21.45	22.28	22.75
	12H	21.44	22.21	21.92	22.69	23.15	21.14	21.91	21.62	22.38	22.85
8H	4H	20.76	21.62	21.22	22.06	22.52	20.49	21.34	20.95	21.78	22.25
	6H	21.49	22.20	21.99	22.69	23.17	21.23	21.94	21.72	22.42	22.90
	8H	21.77	22.41	22.28	22.92	23.40	21.51	22.15	22.02	22.65	23.14
	12H	22.00	22.57	22.51	23.06	23.62	21.74	22.31	22.25	22.80	23.36
12H	4H	20.79	21.56	21.27	22.04	22.51	20.52	21.29	21.00	21.77	22.23
	6H	21.54	22.18	22.05	22.69	23.18	21.29	21.93	21.80	22.43	22.92
	8H	21.88	22.45	22.39	22.94	23.50	21.63	22.19	22.14	22.68	23.24