

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: P242889

Luminaire Tested: S125RDRP-S610D930-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P242889
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-27)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S610D930-X4F0-XX-UDD-F-W
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

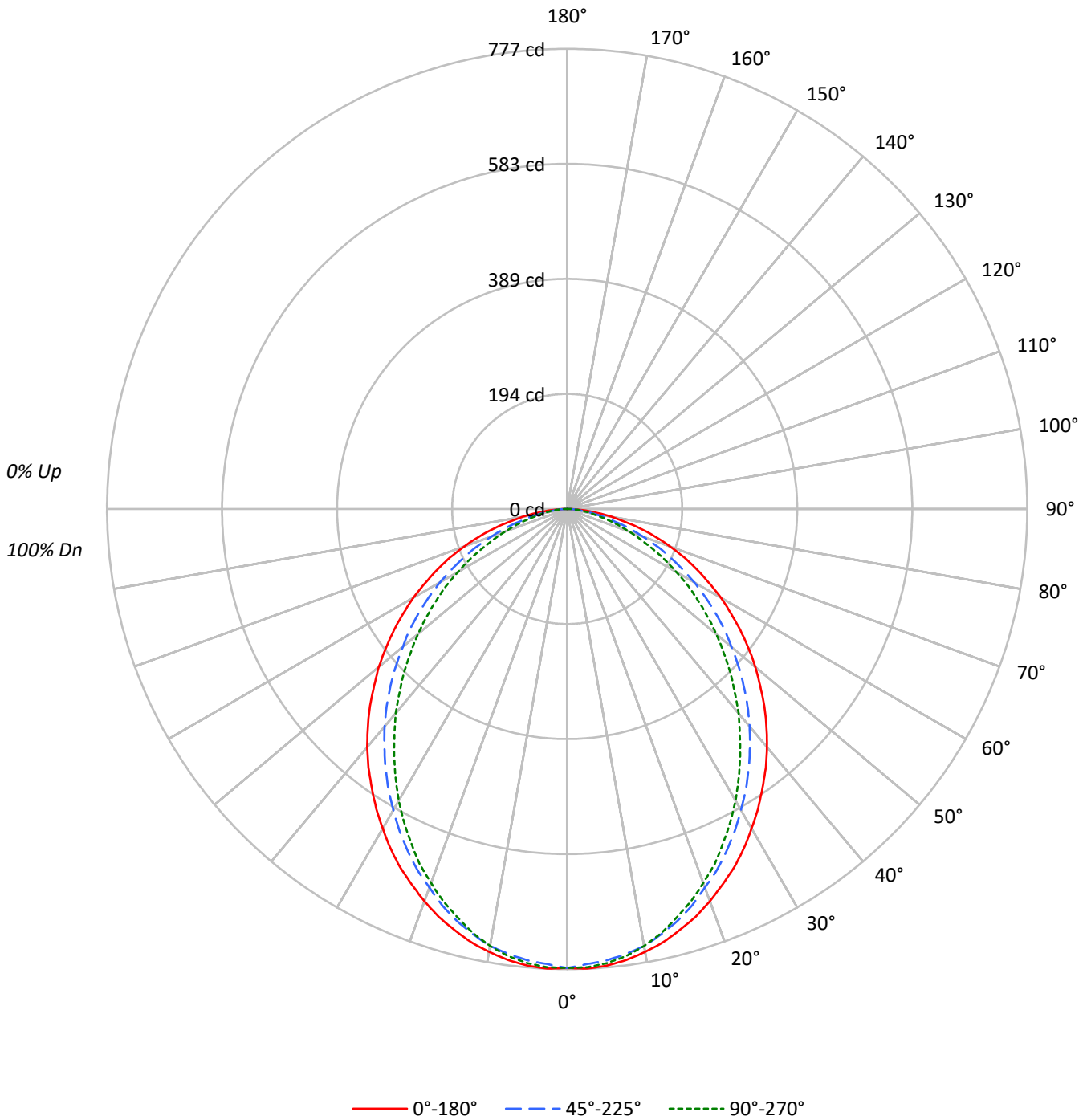
Lumens per Lamp: N/A
Luminaire Lumens: 1831.3 lumens
Efficiency: N/A
Efficacy: 97.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

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

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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	109	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	100	92	86	80	98	90	84	79	87	82	78	84	79	76	81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	61
4	84	73	64	58	82	71	64	57	69	62	57	67	61	56	64	59	55	53
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	44	55	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	39	49	43	38	36
8	62	49	41	35	61	48	41	35	47	40	35	46	39	35	45	39	34	33
9	58	45	37	32	57	45	37	32	44	37	32	42	36	31	41	36	31	29
10	55	42	34	29	54	41	34	29	40	34	29	39	33	29	39	33	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5509	5509	5509
5°	5521	5459	5492
10°	5480	5408	5408
15°	5415	5298	5255
20°	5331	5145	5083
25°	5234	4995	4885
30°	5112	4819	4665
35°	4988	4638	4419
40°	4872	4448	4177
45°	4731	4237	3913
50°	4590	4007	3638
55°	4425	3787	3344
60°	4260	3520	3029
65°	4066	3209	2667
70°	3844	2822	2298
75°	3537	2378	1914
80°	3115	1870	1604
85°	2626	1525	1435

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4731 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.9	4.0
10°-20°	203.9	11.1
20°-30°	295.6	16.1
30°-40°	336.8	18.4
40°-50°	328.2	17.9
50°-60°	276.2	15.1
60°-70°	193.6	10.6
70°-80°	99.3	5.4
80°-90°	24.8	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°	572.4	31.3
0°-40°	909.2	49.6
0°-60°	1513.7	82.7
0°-90°	1831.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1831.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	775	775	775	775	775	
5°	774	772	765	771	770	73
15°	736	732	720	720	714	207
25°	667	659	637	629	623	307
35°	575	561	534	518	509	360
45°	471	454	422	398	389	363
55°	357	338	306	279	270	319
65°	242	222	191	167	159	239
75°	129	111	87	74	70	136
85°	32	22	19	18	18	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	775.1	775.1	775.1	775.1	775.1
2.5°	776.8	775.1	769.2	775.1	774.5
5°	773.9	771.6	765.1	771.0	769.8
7.5°	768.1	765.7	758.1	762.8	761.6
10°	759.3	757.5	749.3	751.1	749.3
12.5°	749.3	747.0	735.3	736.4	733.5
15°	735.9	732.3	720.0	719.5	714.2
17.5°	721.8	716.5	701.9	699.0	694.9
20°	704.8	699.0	680.2	677.3	672.0
22.5°	686.1	680.2	660.3	653.9	649.8
25°	667.4	658.6	636.9	629.3	622.9
27.5°	646.3	635.8	612.9	603.0	596.5
30°	622.9	611.7	587.2	573.7	568.4
32.5°	600.0	586.6	561.4	546.2	539.2
35°	574.9	560.8	534.5	517.5	509.3
37.5°	550.9	533.9	507.0	487.1	478.9
40°	525.1	507.5	479.4	457.2	450.2
42.5°	498.2	480.0	450.8	429.7	418.6
45°	470.7	453.7	421.5	398.1	389.3
47.5°	442.0	424.4	392.2	368.2	358.3
50°	415.1	395.7	362.4	337.8	329.0
52.5°	385.8	365.9	334.9	307.9	299.1
55°	357.1	338.4	305.6	279.2	269.9
57.5°	327.8	307.9	276.3	250.6	242.4
60°	299.7	279.2	247.6	221.9	213.1
62.5°	269.9	250.6	218.4	194.9	186.2
65°	241.8	221.9	190.8	167.4	158.6
67.5°	213.7	193.8	163.9	141.7	134.6
70°	185.0	165.1	135.8	117.7	110.6
72.5°	156.9	137.6	110.6	94.3	90.2
75°	128.8	111.2	86.6	73.8	69.7
77.5°	100.1	86.1	65.6	55.6	52.1
80°	76.1	62.1	45.7	40.4	39.2
82.5°	52.7	40.4	30.4	28.7	28.1
85°	32.2	21.7	18.7	18.1	17.6
87.5°	13.5	9.4	8.8	8.8	8.2
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	17.27	18.84	17.63	19.16	19.47	15.70	17.28	16.07	17.59	17.91
	3H	19.05	20.47	19.43	20.80	21.16	17.01	18.43	17.39	18.76	19.12
	4H	19.71	21.05	20.11	21.40	21.77	17.43	18.76	17.82	19.11	19.48
	6H	20.18	21.42	20.59	21.78	22.17	17.68	18.91	18.09	19.28	19.67
	8H	20.33	21.51	20.76	21.90	22.30	17.76	18.94	18.19	19.33	19.73
	12H	20.43	21.56	20.86	21.94	22.37	17.82	18.94	18.25	19.32	19.75
4H	2H	17.66	18.99	18.06	19.34	19.72	16.39	17.72	16.79	18.07	18.45
	3H	19.64	20.75	20.05	21.15	21.55	17.89	19.00	18.30	19.40	19.80
	4H	20.43	21.43	20.86	21.84	22.28	18.38	19.39	18.82	19.80	20.24
	6H	21.02	21.89	21.48	22.33	22.79	18.73	19.60	19.18	20.04	20.50
	8H	21.21	22.03	21.67	22.47	22.94	18.84	19.65	19.30	20.10	20.56
	12H	21.35	22.08	21.83	22.56	23.03	18.92	19.65	19.41	20.13	20.60
8H	4H	20.55	21.37	21.01	21.81	22.28	18.70	19.51	19.16	19.96	20.42
	6H	21.23	21.90	21.72	22.39	22.87	19.12	19.80	19.62	20.29	20.76
	8H	21.47	22.08	21.99	22.59	23.07	19.28	19.89	19.79	20.40	20.88
	12H	21.67	22.21	22.18	22.70	23.26	19.42	19.96	19.93	20.45	21.01
12H	4H	20.54	21.27	21.03	21.75	22.22	18.74	19.47	19.22	19.94	20.41
	6H	21.22	21.83	21.73	22.34	22.82	19.17	19.78	19.68	20.29	20.78
	8H	21.51	22.04	22.02	22.54	23.10	19.38	19.92	19.89	20.41	20.97