

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: P243749

Luminaire Tested: S125RDRP-H610D930-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P243749
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-66)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-H610D930-X4F0-XX-UDD-F-W
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

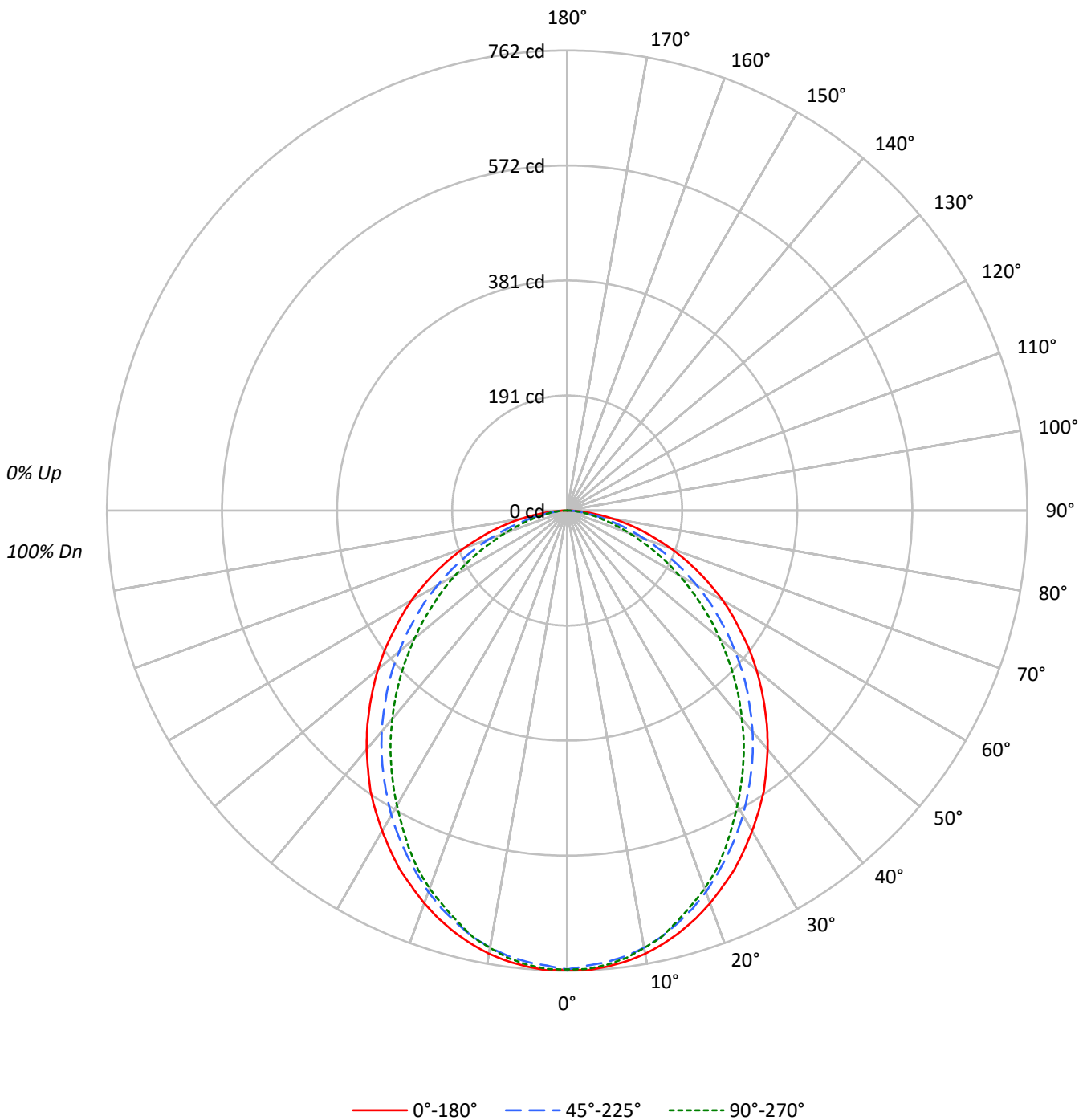
Lumens per Lamp: N/A
Luminaire Lumens: 1816.3 lumens
Efficiency: N/A
Efficacy: 105.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.12 / 1.26
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 17.2
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	109	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	100	92	86	80	97	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	63	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	43	55	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	49	43	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	35	45	39	34	32
9	58	45	37	32	57	45	37	32	43	36	31	42	36	31	41	35	31	29
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5401	5401	5401
5°	5409	5355	5387
10°	5378	5304	5307
15°	5315	5204	5179
20°	5233	5081	5036
25°	5140	4932	4851
30°	5028	4777	4626
35°	4924	4607	4415
40°	4791	4433	4176
45°	4655	4234	3928
50°	4519	4015	3648
55°	4358	3772	3354
60°	4226	3524	3036
65°	4023	3227	2687
70°	3795	2824	2292
75°	3493	2359	1865
80°	3070	1825	1535
85°	2618	1509	1419

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4655 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.6	3.9
10°-20°	200.5	11.0
20°-30°	291.7	16.1
30°-40°	334.1	18.4
40°-50°	326.9	18.0
50°-60°	276.0	15.2
60°-70°	193.3	10.6
70°-80°	98.1	5.4
80°-90°	24.2	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°	563.8	31.0
0°-40°	897.9	49.4
0°-60°	1500.8	82.6
0°-90°	1816.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1816.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	760	760	760	760	760	
5°	758	757	751	756	755	72
15°	722	720	707	707	704	204
25°	656	648	629	622	619	302
35°	568	554	531	515	509	354
45°	463	448	421	399	391	357
55°	352	336	304	280	271	316
65°	239	221	192	168	160	237
75°	127	111	86	72	68	134
85°	32	21	18	17	17	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	759.9	759.9	759.9	759.9	759.9
2.5°	762.0	760.4	754.4	759.9	759.9
5°	758.2	756.6	750.6	755.5	755.0
7.5°	752.8	751.2	744.1	749.0	747.4
10°	745.2	743.0	734.9	737.6	735.4
12.5°	734.9	732.7	722.9	724.0	722.9
15°	722.4	719.7	707.2	706.6	703.9
17.5°	708.2	704.4	690.8	689.2	684.9
20°	691.9	687.0	671.8	668.6	665.8
22.5°	673.5	668.6	650.6	645.7	644.1
25°	655.5	647.9	628.9	622.4	618.6
27.5°	634.3	625.6	606.1	597.4	590.8
30°	612.6	602.8	582.1	570.7	563.7
32.5°	590.3	578.9	556.6	542.5	536.5
35°	567.5	553.9	531.0	515.3	508.8
37.5°	541.4	527.8	505.0	486.5	480.5
40°	516.4	502.2	477.8	457.7	450.1
42.5°	490.3	475.6	449.0	427.8	421.2
45°	463.1	447.9	421.2	399.0	390.8
47.5°	435.9	420.7	393.0	370.7	360.4
50°	408.7	392.4	363.1	340.3	329.9
52.5°	381.6	363.6	334.8	310.4	301.1
55°	351.7	336.5	304.4	279.9	270.7
57.5°	325.0	308.2	277.8	252.7	242.4
60°	297.3	278.8	247.9	223.4	213.6
62.5°	268.0	249.5	219.6	195.1	186.4
65°	239.2	220.7	191.9	168.0	159.8
67.5°	210.4	193.0	164.2	141.9	132.6
70°	182.6	164.7	135.9	115.8	110.3
72.5°	153.3	139.1	110.3	92.4	88.1
75°	127.2	111.4	85.9	71.7	67.9
77.5°	100.6	85.3	63.6	53.8	50.5
80°	75.0	62.0	44.6	38.6	37.5
82.5°	51.6	39.1	29.4	28.3	27.7
85°	32.1	20.7	18.5	17.4	17.4
87.5°	13.6	8.7	8.7	8.2	8.7
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	17.29	18.86	17.65	19.18	19.49	15.77	17.35	16.14	17.67	17.98
	3H	19.05	20.47	19.42	20.79	21.16	17.05	18.47	17.43	18.80	19.16
	4H	19.70	21.04	20.10	21.39	21.76	17.44	18.78	17.84	19.12	19.50
	6H	20.17	21.41	20.59	21.78	22.17	17.68	18.91	18.09	19.28	19.67
	8H	20.32	21.50	20.74	21.89	22.29	17.75	18.93	18.18	19.32	19.72
	12H	20.41	21.54	20.84	21.92	22.35	17.81	18.93	18.24	19.32	19.74
4H	2H	17.69	19.02	18.08	19.37	19.75	16.46	17.79	16.86	18.14	18.52
	3H	19.65	20.76	20.06	21.16	21.56	17.92	19.03	18.33	19.43	19.83
	4H	20.43	21.43	20.86	21.85	22.28	18.39	19.39	18.82	19.81	20.24
	6H	21.02	21.90	21.48	22.34	22.79	18.71	19.58	19.16	20.02	20.48
	8H	21.21	22.02	21.67	22.47	22.93	18.81	19.63	19.27	20.07	20.54
	12H	21.34	22.07	21.82	22.55	23.02	18.90	19.63	19.38	20.11	20.58
8H	4H	20.55	21.36	21.01	21.81	22.27	18.70	19.51	19.16	19.96	20.42
	6H	21.22	21.90	21.72	22.39	22.87	19.09	19.77	19.59	20.26	20.73
	8H	21.46	22.07	21.97	22.57	23.06	19.25	19.85	19.76	20.36	20.85
	12H	21.65	22.19	22.16	22.68	23.24	19.38	19.92	19.89	20.41	20.97
12H	4H	20.54	21.27	21.02	21.75	22.22	18.73	19.47	19.22	19.94	20.41
	6H	21.21	21.82	21.73	22.33	22.82	19.14	19.75	19.65	20.26	20.74
	8H	21.49	22.03	22.00	22.52	23.08	19.34	19.88	19.85	20.37	20.93