

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: P243730

Luminaire Tested: S125RDRP-H610D927-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P243730
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-H610D927-X4F0-XX-UDD-F-W
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

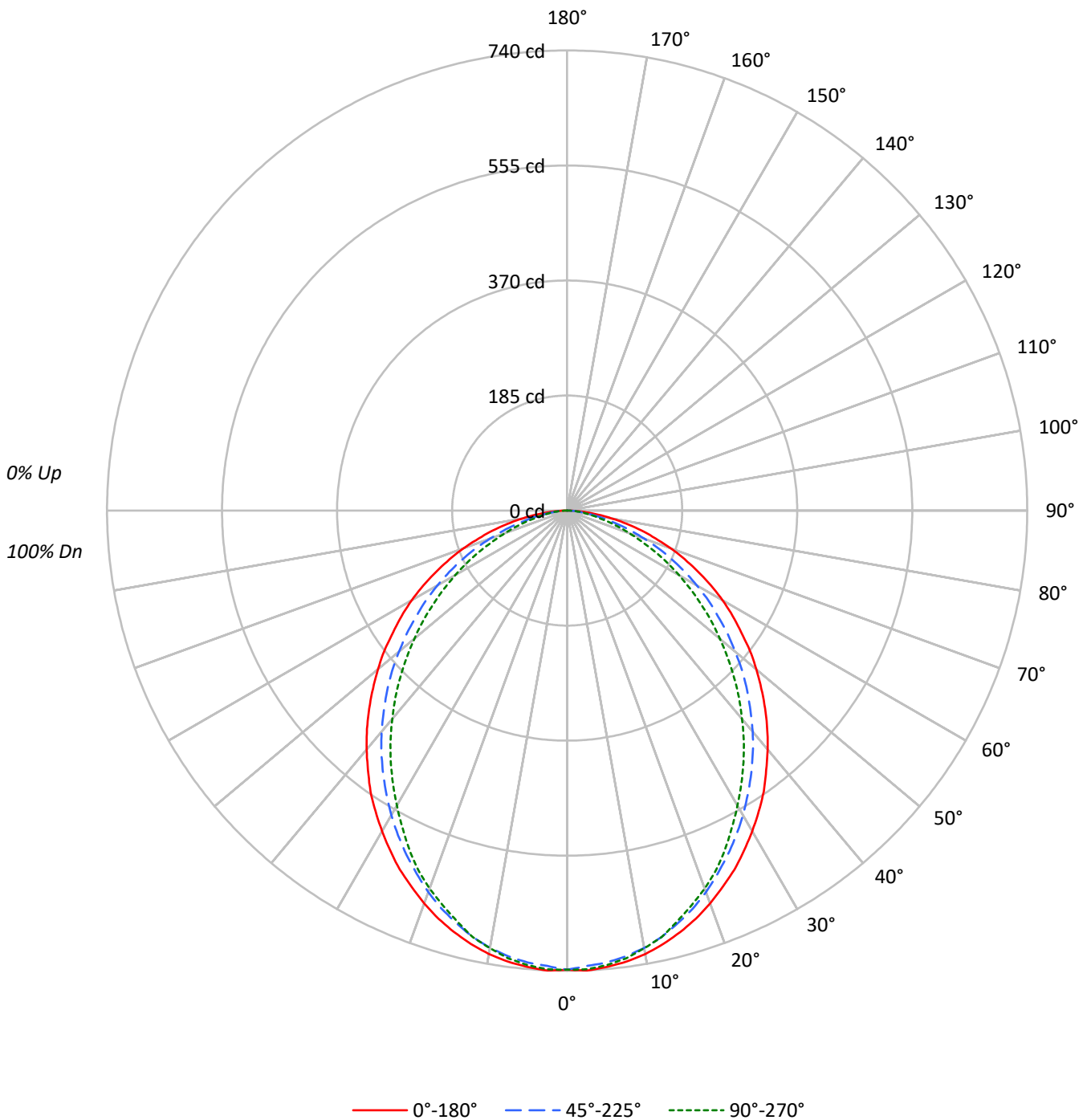
Lumens per Lamp: N/A
Luminaire Lumens: 1764.8 lumens
Efficiency: N/A
Efficacy: 102.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.12 / 1.26
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

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	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					100			
1	109	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85					85			
2	100	92	86	80	97	90	84	79	87	82	78	84	79	76	81	77	74	72					72			
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	61					61			
4	84	73	64	58	82	71	63	57	69	62	57	67	61	56	64	59	55	53					53			
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46					46			
6	72	59	50	44	70	58	50	44	56	49	43	55	48	43	53	47	43	41					41			
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	49	43	38	36					36			
8	62	49	41	35	61	48	40	35	47	40	35	46	39	35	45	39	34	32					32			
9	58	45	37	32	57	45	37	32	43	36	31	42	36	31	41	35	31	29					29			
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28	27					27			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5247	5247	5247
5°	5256	5204	5234
10°	5226	5153	5157
15°	5165	5056	5032
20°	5085	4937	4894
25°	4995	4792	4713
30°	4885	4642	4495
35°	4784	4477	4289
40°	4655	4307	4057
45°	4523	4114	3816
50°	4392	3901	3545
55°	4234	3665	3259
60°	4107	3423	2951
65°	3908	3135	2612
70°	3689	2743	2228
75°	3394	2290	1812
80°	2984	1772	1490
85°	2544	1468	1378

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4523 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.5	3.9
10°-20°	194.8	11.0
20°-30°	283.4	16.1
30°-40°	324.6	18.4
40°-50°	317.6	18.0
50°-60°	268.2	15.2
60°-70°	187.8	10.6
70°-80°	95.4	5.4
80°-90°	23.5	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°	547.8	31.0
0°-40°	872.4	49.4
0°-60°	1458.2	82.6
0°-90°	1764.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1764.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	738	738	738	738	738	
5°	737	735	729	734	734	70
15°	702	699	687	687	684	198
25°	637	630	611	605	601	293
35°	551	538	516	501	494	344
45°	450	435	409	388	380	347
55°	342	327	296	272	263	307
65°	232	214	186	163	155	230
75°	124	108	83	70	66	131
85°	31	20	18	17	17	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	738.3	738.3	738.3	738.3	738.3
2.5°	740.4	738.9	733.0	738.3	738.3
5°	736.7	735.2	729.4	734.1	733.6
7.5°	731.5	729.9	723.0	727.8	726.2
10°	724.1	722.0	714.0	716.7	714.6
12.5°	714.0	711.9	702.4	703.5	702.4
15°	701.9	699.2	687.1	686.6	683.9
17.5°	688.2	684.5	671.3	669.7	665.4
20°	672.3	667.6	652.8	649.6	647.0
22.5°	654.4	649.6	632.2	627.4	625.8
25°	636.9	629.5	611.0	604.7	601.0
27.5°	616.3	607.9	588.9	580.4	574.1
30°	595.2	585.7	565.6	554.5	547.7
32.5°	573.6	562.5	540.8	527.1	521.3
35°	551.4	538.2	516.0	500.7	494.3
37.5°	526.0	512.8	490.6	472.7	466.9
40°	501.7	488.0	464.2	444.7	437.3
42.5°	476.4	462.1	436.2	415.6	409.3
45°	450.0	435.2	409.3	387.6	379.7
47.5°	423.6	408.8	381.8	360.2	350.2
50°	397.2	381.3	352.8	330.6	320.6
52.5°	370.7	353.3	325.3	301.6	292.6
55°	341.7	326.9	295.8	272.0	263.0
57.5°	315.8	299.5	269.9	245.6	235.5
60°	288.9	270.9	240.8	217.1	207.6
62.5°	260.4	242.4	213.4	189.6	181.1
65°	232.4	214.4	186.4	163.2	155.3
67.5°	204.4	187.5	159.5	137.8	128.9
70°	177.5	160.0	132.0	112.5	107.2
72.5°	148.9	135.2	107.2	89.8	85.6
75°	123.6	108.3	83.4	69.7	66.0
77.5°	97.7	82.9	61.8	52.3	49.1
80°	72.9	60.2	43.3	37.5	36.4
82.5°	50.2	38.0	28.5	27.5	26.9
85°	31.2	20.1	18.0	16.9	16.9
87.5°	13.2	8.5	8.5	7.9	8.5
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	17.19	18.76	17.55	19.08	19.39	15.68	17.25	16.04	17.57	17.88
	3H	18.95	20.37	19.32	20.70	21.06	16.95	18.38	17.33	18.70	19.06
	4H	19.60	20.94	20.00	21.29	21.66	17.34	18.68	17.74	19.03	19.40
	6H	20.08	21.31	20.49	21.68	22.07	17.58	18.81	17.99	19.18	19.57
	8H	20.22	21.40	20.64	21.79	22.19	17.65	18.83	18.08	19.22	19.62
	12H	20.32	21.44	20.75	21.82	22.25	17.71	18.83	18.14	19.22	19.65
4H	2H	17.59	18.92	17.98	19.27	19.65	16.36	17.70	16.76	18.04	18.42
	3H	19.55	20.66	19.96	21.06	21.46	17.82	18.93	18.23	19.33	19.73
	4H	20.33	21.33	20.76	21.75	22.18	18.29	19.29	18.72	19.71	20.14
	6H	20.92	21.80	21.38	22.24	22.69	18.61	19.48	19.06	19.92	20.38
	8H	21.11	21.92	21.57	22.37	22.83	18.71	19.53	19.18	19.97	20.44
	12H	21.24	21.97	21.72	22.45	22.92	18.80	19.53	19.28	20.01	20.48
8H	4H	20.45	21.27	20.91	21.71	22.17	18.60	19.41	19.06	19.86	20.32
	6H	21.12	21.80	21.62	22.29	22.77	18.99	19.67	19.49	20.16	20.63
	8H	21.36	21.97	21.87	22.48	22.96	19.15	19.75	19.66	20.26	20.75
	12H	21.55	22.09	22.06	22.58	23.14	19.28	19.82	19.79	20.31	20.87
12H	4H	20.44	21.17	20.92	21.65	22.12	18.63	19.37	19.12	19.84	20.31
	6H	21.11	21.72	21.63	22.23	22.72	19.04	19.65	19.55	20.16	20.64
	8H	21.39	21.93	21.90	22.42	22.98	19.24	19.78	19.75	20.27	20.83