

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: P243758

Luminaire Tested: S125RDRP-H375D940-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P243758
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-H375D940-X4F0-XX-UDD-F-W
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

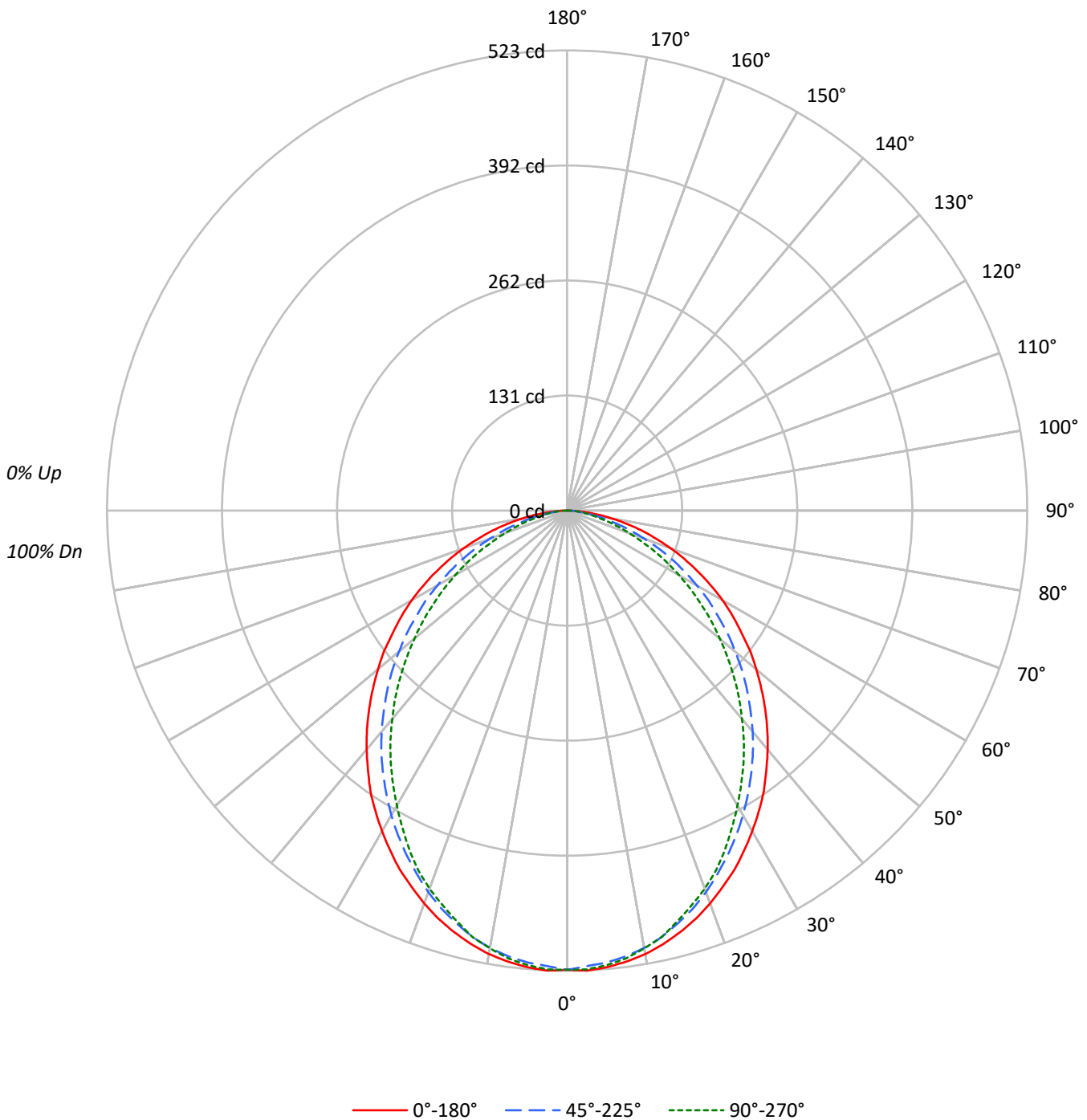
Lumens per Lamp: N/A
Luminaire Lumens: 1247.4 lumens
Efficiency: N/A
Efficacy: 111.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.12 / 1.26
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 11.2
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°	3709	3709	3709
5°	3716	3678	3699
10°	3694	3642	3645
15°	3650	3574	3557
20°	3594	3490	3459
25°	3531	3387	3331
30°	3453	3281	3177
35°	3381	3164	3032
40°	3290	3044	2868
45°	3196	2908	2698
50°	3104	2758	2506
55°	2992	2590	2304
60°	2903	2419	2085
65°	2763	2217	1845
70°	2606	1939	1575
75°	2400	1620	1282
80°	2108	1252	1056
85°	1794	1036	970

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3196 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.1	3.9
10°-20°	137.7	11.0
20°-30°	200.4	16.1
30°-40°	229.5	18.4
40°-50°	224.5	18.0
50°-60°	189.6	15.2
60°-70°	132.7	10.6
70°-80°	67.4	5.4
80°-90°	16.6	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°	387.2	31.0
0°-40°	616.6	49.4
0°-60°	1030.7	82.6
0°-90°	1247.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1247.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	522	522	522	522	522	
5°	521	520	516	519	518	49
15°	496	494	486	485	483	140
25°	450	445	432	427	425	207
35°	390	380	365	354	349	243
45°	318	308	289	274	268	245
55°	242	231	209	192	186	217
65°	164	152	132	115	110	163
75°	87	76	59	49	47	92
85°	22	14	13	12	12	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	521.9	521.9	521.9	521.9	521.9
2.5°	523.4	522.2	518.1	521.9	521.9
5°	520.8	519.6	515.5	518.9	518.5
7.5°	517.0	515.9	511.0	514.4	513.3
10°	511.8	510.3	504.7	506.6	505.1
12.5°	504.7	503.2	496.5	497.2	496.5
15°	496.1	494.2	485.7	485.3	483.4
17.5°	486.4	483.8	474.5	473.3	470.4
20°	475.2	471.8	461.4	459.2	457.3
22.5°	462.5	459.2	446.8	443.5	442.4
25°	450.2	445.0	431.9	427.4	424.8
27.5°	435.6	429.7	416.2	410.3	405.8
30°	420.7	414.0	399.8	392.0	387.1
32.5°	405.4	397.6	382.3	372.6	368.4
35°	389.7	380.4	364.7	353.9	349.4
37.5°	371.8	362.5	346.8	334.1	330.0
40°	354.6	344.9	328.1	314.3	309.1
42.5°	336.7	326.6	308.3	293.8	289.3
45°	318.0	307.6	289.3	274.0	268.4
47.5°	299.4	288.9	269.9	254.6	247.5
50°	280.7	269.5	249.4	233.7	226.6
52.5°	262.1	249.7	230.0	213.2	206.8
55°	241.5	231.1	209.0	192.2	185.9
57.5°	223.2	211.7	190.8	173.6	166.5
60°	204.2	191.5	170.2	153.4	146.7
62.5°	184.0	171.3	150.8	134.0	128.0
65°	164.3	151.6	131.8	115.3	109.7
67.5°	144.5	132.5	112.7	97.4	91.1
70°	125.4	113.1	93.3	79.5	75.8
72.5°	105.3	95.6	75.8	63.5	60.5
75°	87.4	76.5	59.0	49.3	46.7
77.5°	69.1	58.6	43.7	37.0	34.7
80°	51.5	42.6	30.6	26.5	25.8
82.5°	35.5	26.9	20.2	19.4	19.0
85°	22.0	14.2	12.7	11.9	11.9
87.5°	9.3	6.0	6.0	5.6	6.0
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	15.98	17.56	16.35	17.87	18.19	14.47	16.05	14.83	16.36	16.68
	3H	17.74	19.16	18.12	19.49	19.85	15.75	17.17	16.13	17.50	17.86
	4H	18.40	19.73	18.80	20.08	20.46	16.14	17.47	16.54	17.82	18.20
	6H	18.87	20.10	19.28	20.47	20.86	16.37	17.61	16.78	17.97	18.36
	8H	19.01	20.19	19.44	20.58	20.98	16.45	17.63	16.87	18.02	18.42
	12H	19.11	20.24	19.54	20.62	21.05	16.50	17.63	16.93	18.01	18.44
4H	2H	16.38	17.72	16.78	18.06	18.44	15.16	16.49	15.55	16.84	17.22
	3H	18.34	19.46	18.75	19.85	20.25	16.62	17.73	17.03	18.13	18.53
	4H	19.12	20.13	19.56	20.54	20.98	17.09	18.09	17.52	18.50	18.94
	6H	19.72	20.59	20.17	21.03	21.49	17.40	18.28	17.86	18.72	19.18
	8H	19.90	20.72	20.36	21.16	21.63	17.51	18.33	17.97	18.77	19.24
	12H	20.04	20.77	20.52	21.25	21.72	17.59	18.32	18.07	18.80	19.27
8H	4H	19.24	20.06	19.71	20.50	20.97	17.39	18.21	17.86	18.65	19.12
	6H	19.92	20.59	20.41	21.08	21.56	17.79	18.46	18.28	18.95	19.43
	8H	20.16	20.76	20.67	21.27	21.76	17.94	18.55	18.45	19.06	19.54
	12H	20.35	20.88	20.85	21.37	21.94	18.08	18.61	18.59	19.11	19.67
12H	4H	19.24	19.97	19.72	20.44	20.91	17.43	18.16	17.91	18.64	19.11
	6H	19.91	20.52	20.42	21.03	21.51	17.84	18.45	18.35	18.95	19.44
	8H	20.19	20.72	20.70	21.22	21.78	18.04	18.57	18.55	19.07	19.63