

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: P243715

Luminaire Tested: S125DRP-H610D930-X4F0-XX-UDD-D-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P243715
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-56)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DRP-H610D930-X4F0-XX-UDD-D-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN DROP DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

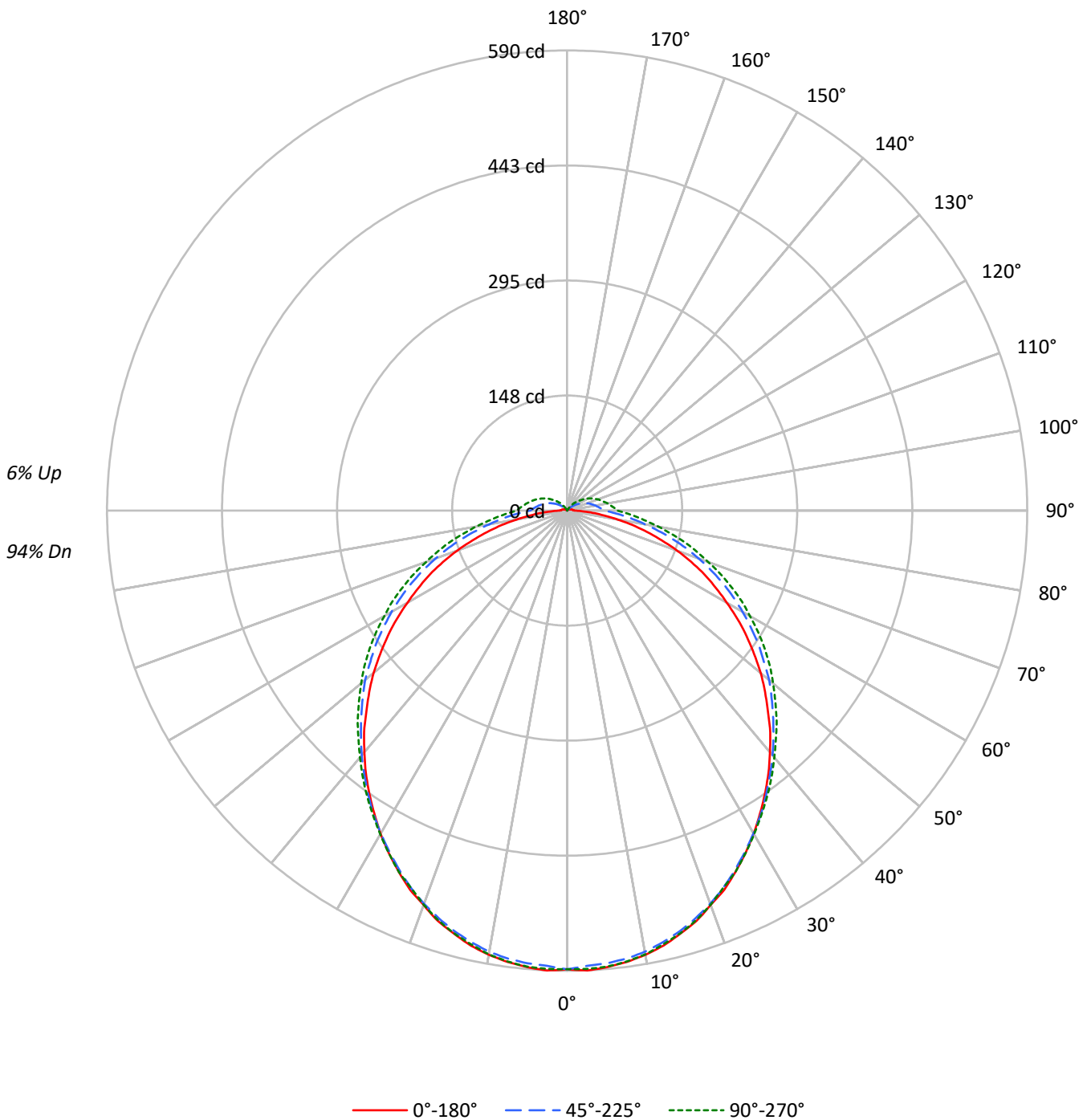
Lumens per Lamp: N/A
Luminaire Lumens: 1826.1 lumens
Efficiency: N/A
Efficacy: 106.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.39' x L: 3.88' x H: 0.08')
CIE Type: Direct

Input Watts (W): 17.2
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	50	30	10	0	
RCR																						
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96	94				
1	106	101	96	92	103	98	94	90	93	89	86	88	85	82	83	81	79	76				
2	96	88	80	74	93	85	78	73	81	75	70	76	72	68	72	69	65	63				
3	88	77	68	61	84	75	67	60	71	64	59	67	61	57	64	59	55	53				
4	80	68	59	52	77	66	58	51	63	55	50	60	53	48	57	51	47	45				
5	74	60	51	44	71	59	50	44	56	49	43	53	47	42	51	45	41	39				
6	68	54	45	39	66	53	45	38	51	43	38	48	42	37	46	40	36	34				
7	63	49	40	34	61	48	40	34	46	39	33	44	37	33	42	36	32	30				
8	59	45	36	30	57	44	36	30	42	35	30	40	34	29	39	33	29	27				
9	55	41	33	27	53	40	33	27	39	32	27	37	31	26	36	30	26	24				
10	51	38	30	25	50	37	30	25	36	29	24	35	28	24	33	28	23	22				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4180	4180	4180
5°	4184	4098	4111
10°	4158	4028	4019
15°	4108	3932	3904
20°	4038	3827	3773
25°	3967	3703	3644
30°	3877	3578	3503
35°	3782	3456	3377
40°	3686	3337	3251
45°	3584	3219	3147
50°	3493	3121	3038
55°	3378	3000	2938
60°	3240	2868	2810
65°	3128	2730	2684
70°	2943	2560	2521
75°	2695	2359	2378
80°	2400	2142	2195
85°	2134	2004	2090

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3584 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.7	3.0
10°-20°	158.1	8.7
20°-30°	235.4	12.9
30°-40°	278.8	15.3
40°-50°	288.5	15.8
50°-60°	266.1	14.6
60°-70°	215.0	11.8
70°-80°	143.7	7.9
80°-90°	74.1	4.1
90°-100°	41.6	2.3
100°-110°	30.9	1.7
110°-120°	20.5	1.1
120°-130°	11.5	0.6
130°-140°	5.2	0.3
140°-150°	1.1	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	449.1	24.6
0°-40°	727.9	39.9
0°-60°	1282.5	70.2
0°-90°	1715.4	93.9
90°-120°	93.0	5.1
90°-150°	110.7	6.1
90°-180°	111.0	6.1
0°-180°	1826.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	588	588	588	588	588	
5°	588	587	583	587	587	56
15°	562	563	558	562	561	158
25°	511	513	509	512	511	235
35°	442	446	445	447	447	277
45°	364	370	373	379	380	281
55°	281	290	300	307	309	251
65°	195	206	220	230	233	192
75°	106	122	139	151	156	113
85°	33	51	71	84	88	34
90°	9	27	47	60	65	6
95°	8	23	42	54	58	6
105°	5	15	32	44	47	6
115°	4	8	22	33	36	4
125°	2	2	13	21	25	2
135°	1	1	5	12	15	1
145°	0	0	0	3	5	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	588.1	588.1	588.1	588.1	588.1
2.5°	590.3	588.7	584.3	588.7	588.1
5°	587.6	587.0	582.7	587.0	587.0
7.5°	583.8	583.2	579.4	583.8	583.2
10°	578.3	578.3	574.5	577.8	577.8
12.5°	571.3	571.3	566.9	570.7	569.6
15°	561.5	563.1	558.2	561.5	560.9
17.5°	551.7	551.7	547.9	550.6	550.6
20°	538.1	540.3	536.5	539.2	537.6
22.5°	526.2	527.2	523.4	526.2	523.4
25°	510.9	513.1	508.8	511.5	510.9
27.5°	495.2	496.8	493.5	496.8	495.2
30°	478.3	480.0	477.8	480.0	479.4
32.5°	460.4	463.6	462.0	463.6	463.1
35°	442.4	445.7	444.6	446.8	447.3
37.5°	424.0	427.2	427.2	429.9	430.5
40°	404.4	408.7	409.8	413.6	413.1
42.5°	385.4	389.7	391.4	396.2	396.2
45°	364.2	370.2	373.4	379.4	379.9
47.5°	344.1	350.6	355.5	360.9	362.0
50°	324.0	329.9	338.1	343.5	344.6
52.5°	302.2	309.8	318.0	325.6	327.8
55°	281.0	289.7	299.5	306.6	309.3
57.5°	259.3	268.5	279.4	288.1	290.3
60°	236.4	247.3	259.8	268.5	270.7
62.5°	215.2	227.2	240.2	249.5	252.7
65°	194.6	206.0	220.1	229.9	232.6
67.5°	172.3	184.8	199.5	210.4	213.1
70°	150.0	163.6	179.4	189.7	192.4
72.5°	127.2	142.4	159.3	170.7	173.9
75°	106.0	121.8	139.1	151.1	155.5
77.5°	85.9	102.2	119.6	132.1	135.9
80°	65.8	82.6	101.6	114.7	118.5
82.5°	47.8	65.8	85.3	98.4	102.2
85°	32.6	51.1	71.2	83.7	88.1
87.5°	20.1	38.0	58.7	71.2	75.6
90°	9.2	27.2	47.3	60.3	64.7
92.5°	8.2	25.0	44.6	57.6	61.4
95°	7.6	22.8	41.9	54.4	58.2
97.5°	7.1	20.7	39.1	51.6	55.4
100°	6.5	18.5	37.0	48.9	52.7
102.5°	6.0	16.8	34.2	46.2	49.5
105°	5.4	14.7	32.1	43.5	47.3
107.5°	4.9	12.5	29.9	40.8	44.6
110°	4.3	10.9	27.2	38.0	41.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	3.8	9.2	25.0	35.3	39.1
115°	3.8	7.6	22.3	32.6	36.4
117.5°	3.3	6.0	19.6	29.9	33.7
120°	2.7	4.3	17.4	27.2	31.0
122.5°	2.7	3.3	15.2	24.5	28.3
125°	2.2	2.2	13.0	21.2	25.0
127.5°	2.2	1.6	10.9	19.0	21.7
130°	1.6	1.1	9.2	16.8	19.6
132.5°	1.6	1.1	7.1	14.7	17.4
135°	1.1	1.1	4.9	12.5	14.7
137.5°	1.1	0.5	3.3	9.8	12.5
140°	0.5	0.5	1.1	7.6	9.8
142.5°	0.5	0.5	0.5	5.4	7.6
145°	0.5	0.0	0.0	3.3	4.9
147.5°	0.5	0.0	0.0	1.1	2.7
150°	0.0	0.0	0.0	0.0	0.5
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	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	14.88	16.42	15.34	16.86	17.32	15.97	17.51	16.43	17.94	18.41
	3H	16.53	17.93	17.00	18.38	18.88	18.14	19.53	18.61	19.98	20.49
	4H	17.10	18.42	17.59	18.89	19.41	19.10	20.42	19.59	20.89	21.40
	6H	17.49	18.71	17.99	19.20	19.73	20.00	21.23	20.51	21.71	22.25
	8H	17.59	18.77	18.11	19.27	19.81	20.43	21.61	20.95	22.11	22.65
	12H	17.66	18.78	18.18	19.28	19.85	20.88	22.01	21.41	22.51	23.08
4H	2H	15.65	16.97	16.14	17.43	17.95	16.50	17.82	16.99	18.29	18.80
	3H	17.53	18.65	18.03	19.16	19.70	18.88	20.00	19.39	20.51	21.05
	4H	18.23	19.25	18.76	19.78	20.35	19.99	21.01	20.52	21.53	22.11
	6H	18.75	19.64	19.29	20.19	20.78	21.06	21.96	21.61	22.51	23.10
	8H	18.90	19.74	19.45	20.29	20.89	21.58	22.42	22.13	22.97	23.57
	12H	19.00	19.77	19.57	20.34	20.95	22.13	22.89	22.70	23.47	24.08
8H	4H	18.72	19.56	19.27	20.11	20.71	20.25	21.09	20.80	21.64	22.24
	6H	19.38	20.09	19.97	20.68	21.29	21.47	22.18	22.06	22.77	23.38
	8H	19.62	20.26	20.22	20.87	21.49	22.11	22.75	22.70	23.35	23.97
	12H	19.81	20.38	20.41	20.97	21.66	22.82	23.38	23.41	23.97	24.66
12H	4H	18.81	19.58	19.39	20.15	20.76	20.27	21.03	20.84	21.61	22.21
	6H	19.54	20.18	20.14	20.79	21.41	21.52	22.16	22.12	22.76	23.38
	8H	19.86	20.43	20.46	21.02	21.71	22.22	22.79	22.82	23.38	24.07