

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: P243631

Luminaire Tested: S125DRP-H375D830-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P243631
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-51)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DRP-H375D830-X4F0-XX-UDD-F-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

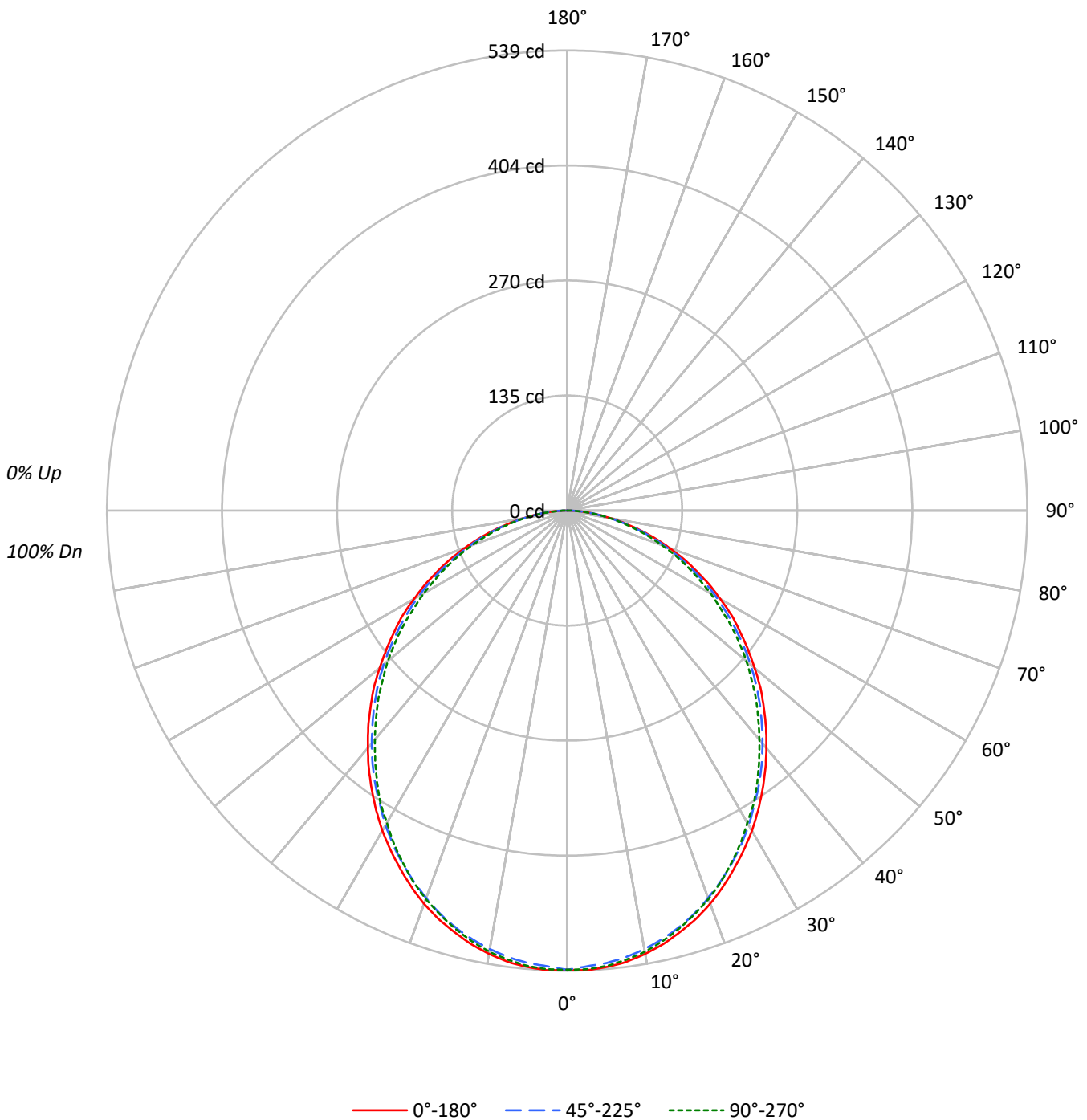
Lumens per Lamp: N/A
Luminaire Lumens: 1388.3 lumens
Efficiency: N/A
Efficacy: 124.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

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	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41	39
7	66	52	44	38	64	51	43	37	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3822	3822	3822
5°	3828	3795	3820
10°	3805	3764	3787
15°	3760	3720	3731
20°	3707	3653	3661
25°	3629	3577	3571
30°	3553	3491	3465
35°	3461	3399	3369
40°	3368	3302	3251
45°	3276	3204	3145
50°	3168	3102	3032
55°	3061	2978	2900
60°	2945	2860	2759
65°	2807	2708	2615
70°	2633	2533	2452
75°	2428	2351	2244
80°	2116	2100	2051
85°	1835	1835	1737

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3276 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.7	3.7
10°-20°	143.2	10.3
20°-30°	211.1	15.2
30°-40°	245.8	17.7
40°-50°	246.3	17.7
50°-60°	215.3	15.5
60°-70°	159.8	11.5
70°-80°	90.6	6.5
80°-90°	25.4	1.8
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°	405.0	29.2
0°-40°	650.8	46.9
0°-60°	1112.4	80.1
0°-90°	1388.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1388.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	538	538	538	538	538	
5°	537	536	532	536	535	51
15°	511	510	506	508	507	144
25°	463	461	456	457	455	213
35°	399	397	392	389	388	250
45°	326	325	319	314	313	251
55°	247	247	240	235	234	221
65°	167	166	161	157	156	165
75°	88	87	86	84	82	94
85°	22	22	22	22	21	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	537.8	537.8	537.8	537.8	537.8
2.5°	539.0	538.2	534.3	538.2	537.8
5°	536.6	535.8	531.9	535.8	535.4
7.5°	533.1	531.9	527.6	531.5	530.7
10°	527.2	526.4	521.6	524.8	524.8
12.5°	520.1	518.9	514.1	516.9	516.5
15°	511.0	510.2	505.5	508.2	507.0
17.5°	501.5	499.5	495.2	497.6	496.0
20°	490.1	488.5	483.0	484.9	484.1
22.5°	477.0	475.1	469.9	471.1	470.7
25°	462.8	461.3	456.1	457.3	455.3
27.5°	448.2	446.3	441.5	441.5	439.6
30°	432.9	430.9	425.4	425.4	422.2
32.5°	416.3	414.7	408.0	407.6	406.8
35°	398.9	396.6	391.8	389.4	388.3
37.5°	381.6	379.6	374.5	371.3	369.3
40°	363.0	361.8	355.9	353.1	350.4
42.5°	344.9	343.7	337.4	332.6	331.4
45°	325.9	325.1	318.8	314.1	312.9
47.5°	307.0	306.2	299.9	294.7	292.8
50°	286.5	286.5	280.5	275.4	274.2
52.5°	266.7	266.3	260.4	255.3	254.1
55°	247.0	246.6	240.3	235.2	234.0
57.5°	228.5	226.1	220.6	216.6	212.7
60°	207.2	206.0	201.2	196.1	194.1
62.5°	187.4	185.8	181.1	176.8	174.0
65°	166.9	165.7	161.0	157.4	155.5
67.5°	147.6	146.0	141.3	138.5	136.9
70°	126.7	125.5	121.9	118.4	118.0
72.5°	108.1	106.5	104.6	101.4	99.8
75°	88.4	86.8	85.6	84.0	81.7
77.5°	69.4	68.7	67.9	66.7	65.5
80°	51.7	51.7	51.3	50.5	50.1
82.5°	36.7	37.1	35.9	35.1	35.1
85°	22.5	22.5	22.5	21.7	21.3
87.5°	11.0	9.9	9.9	9.1	9.1
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	15.97	17.58	16.33	17.90	18.21	15.63	17.25	16.00	17.56	17.87
	3H	17.73	19.18	18.10	19.51	19.87	17.34	18.80	17.72	19.13	19.49
	4H	18.37	19.75	18.77	20.10	20.47	17.98	19.35	18.38	19.70	20.08
	6H	18.84	20.11	19.25	20.47	20.86	18.46	19.73	18.87	20.09	20.48
	8H	18.99	20.20	19.41	20.59	20.99	18.61	19.82	19.03	20.21	20.61
	12H	19.09	20.25	19.52	20.63	21.06	18.71	19.88	19.14	20.26	20.69
4H	2H	16.54	17.91	16.94	18.26	18.64	16.27	17.65	16.67	17.99	18.37
	3H	18.52	19.67	18.93	20.07	20.47	18.20	19.35	18.61	19.75	20.15
	4H	19.30	20.34	19.73	20.75	21.19	18.97	20.01	19.40	20.42	20.86
	6H	19.89	20.80	20.34	21.24	21.69	19.57	20.48	20.02	20.92	21.38
	8H	20.08	20.94	20.55	21.38	21.84	19.77	20.62	20.23	21.06	21.53
	12H	20.23	20.99	20.71	21.47	21.94	19.91	20.68	20.39	21.15	21.62
8H	4H	19.58	20.43	20.04	20.87	21.34	19.29	20.14	19.75	20.58	21.05
	6H	20.29	21.00	20.78	21.48	21.96	20.01	20.72	20.51	21.21	21.68
	8H	20.56	21.20	21.07	21.70	22.19	20.28	20.92	20.79	21.42	21.91
	12H	20.78	21.34	21.29	21.83	22.39	20.50	21.06	21.01	21.55	22.11
12H	4H	19.61	20.37	20.09	20.85	21.32	19.33	20.09	19.81	20.57	21.03
	6H	20.34	20.97	20.85	21.48	21.97	20.07	20.71	20.58	21.21	21.70
	8H	20.67	21.23	21.17	21.72	22.28	20.40	20.96	20.91	21.45	22.01