

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: P243647

Luminaire Tested: S125DRP-H850D930-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P243647
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-H850D930-X4F0-XX-UDD-F-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

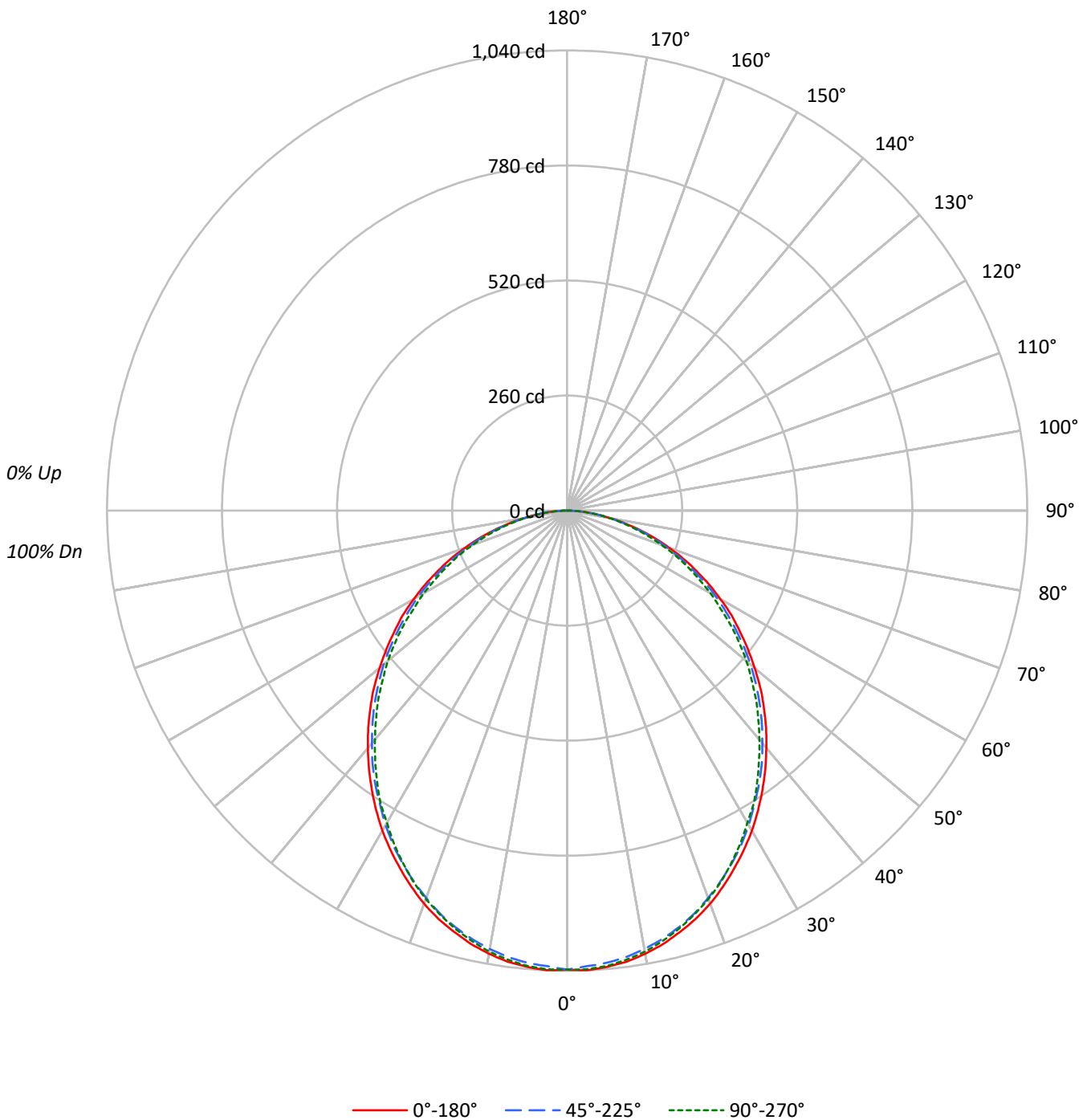
Lumens per Lamp: N/A
Luminaire Lumens: 2678.2 lumens
Efficiency: N/A
Efficacy: 113.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 23.6
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

TEST NUMBER: P243647

CATALOG NUMBER: S125DRP-H850D930-X4F0-XX-UDD-F-W

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7375	7375	7375
5°	7386	7321	7370
10°	7340	7262	7306
15°	7254	7175	7198
20°	7151	7047	7064
25°	7002	6901	6889
30°	6854	6735	6684
35°	6677	6559	6500
40°	6497	6370	6272
45°	6320	6183	6068
50°	6111	5984	5850
55°	5904	5745	5593
60°	5680	5518	5323
65°	5415	5223	5044
70°	5079	4888	4730
75°	4682	4537	4328
80°	4081	4052	3958
85°	3539	3539	3352

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6320 cd/sqm



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CATALOG NUMBER: S125DRP-H850D930-X4F0-XX-UDD-F-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.9	3.7
10°-20°	276.2	10.3
20°-30°	407.2	15.2
30°-40°	474.2	17.7
40°-50°	475.2	17.7
50°-60°	415.4	15.5
60°-70°	308.3	11.5
70°-80°	174.8	6.5
80°-90°	49.0	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°	781.3	29.2
0°-40°	1255.5	46.9
0°-60°	2146.1	80.1
0°-90°	2678.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2678.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1038	1038	1038	1038	1038	
5°	1035	1034	1026	1034	1033	98
15°	986	984	975	980	978	278
25°	893	890	880	882	878	411
35°	770	765	756	751	749	482
45°	629	627	615	606	604	485
55°	476	476	464	454	451	427
65°	322	320	311	304	300	319
75°	170	168	165	162	158	181
85°	43	43	43	42	41	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1037.6	1037.6	1037.6	1037.6	1037.6
2.5°	1039.8	1038.3	1030.7	1038.3	1037.6
5°	1035.3	1033.8	1026.1	1033.8	1033.0
7.5°	1028.4	1026.1	1017.8	1025.4	1023.9
10°	1017.0	1015.5	1006.3	1012.4	1012.4
12.5°	1003.3	1001.0	991.9	997.2	996.4
15°	985.8	984.3	975.1	980.5	978.2
17.5°	967.5	963.7	955.3	959.9	956.9
20°	945.4	942.4	931.7	935.6	934.0
22.5°	920.3	916.5	906.6	908.9	908.1
25°	892.9	889.9	880.0	882.3	878.5
27.5°	864.8	861.0	851.8	851.8	848.0
30°	835.1	831.3	820.6	820.6	814.5
32.5°	803.1	800.1	787.1	786.4	784.8
35°	769.6	765.0	755.9	751.3	749.1
37.5°	736.1	732.3	722.4	716.3	712.5
40°	700.3	698.0	686.6	681.3	676.0
42.5°	665.3	663.0	650.9	641.7	639.4
45°	628.8	627.3	615.1	605.9	603.7
47.5°	592.2	590.7	578.5	568.6	564.8
50°	552.7	552.7	541.2	531.3	529.1
52.5°	514.6	513.8	502.4	492.5	490.2
55°	476.5	475.8	463.6	453.7	451.4
57.5°	440.8	436.2	425.5	417.9	410.3
60°	399.6	397.4	388.2	378.3	374.5
62.5°	361.6	358.5	349.4	341.0	335.7
65°	322.0	319.7	310.6	303.7	299.9
67.5°	284.7	281.7	272.5	267.2	264.1
70°	244.4	242.1	235.2	228.4	227.6
72.5°	208.6	205.5	201.7	195.6	192.6
75°	170.5	167.5	165.2	162.1	157.6
77.5°	134.0	132.5	130.9	128.6	126.4
80°	99.7	99.7	99.0	97.4	96.7
82.5°	70.8	71.6	69.3	67.7	67.7
85°	43.4	43.4	43.4	41.9	41.1
87.5°	21.3	19.0	19.0	17.5	17.5
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	18.25	19.86	18.61	20.18	20.49	17.91	19.53	18.28	19.84	20.16
	3H	20.01	21.47	20.38	21.79	22.15	19.63	21.09	20.00	21.41	21.77
	4H	20.66	22.03	21.06	22.38	22.76	20.26	21.64	20.66	21.99	22.36
	6H	21.12	22.39	21.53	22.76	23.15	20.74	22.01	21.15	22.38	22.77
	8H	21.27	22.48	21.69	22.87	23.27	20.89	22.11	21.32	22.50	22.90
	12H	21.37	22.53	21.80	22.91	23.34	20.99	22.16	21.42	22.54	22.97
4H	2H	18.82	20.20	19.22	20.54	20.92	18.56	19.93	18.95	20.28	20.65
	3H	20.80	21.95	21.21	22.35	22.75	20.49	21.64	20.89	22.03	22.43
	4H	21.58	22.62	22.01	23.03	23.47	21.25	22.29	21.68	22.71	23.14
	6H	22.17	23.08	22.62	23.52	23.98	21.85	22.76	22.31	23.20	23.66
	8H	22.37	23.22	22.83	23.66	24.13	22.05	22.90	22.51	23.35	23.81
	12H	22.51	23.28	22.99	23.75	24.22	22.20	22.96	22.68	23.44	23.91
8H	4H	21.86	22.71	22.32	23.16	23.62	21.57	22.42	22.03	22.87	23.33
	6H	22.57	23.28	23.07	23.77	24.24	22.30	23.00	22.79	23.49	23.97
	8H	22.84	23.48	23.35	23.99	24.47	22.57	23.20	23.08	23.71	24.19
	12H	23.06	23.63	23.57	24.12	24.68	22.78	23.34	23.29	23.83	24.40
12H	4H	21.89	22.65	22.37	23.13	23.60	21.61	22.37	22.09	22.85	23.32
	6H	22.62	23.26	23.13	23.76	24.25	22.35	22.99	22.86	23.50	23.98
	8H	22.95	23.51	23.46	24.00	24.56	22.68	23.24	23.19	23.73	24.29