

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: P243640

Luminaire Tested: S125DRP-H375D840-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P243640
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-H375D840-X4F0-XX-UDD-F-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

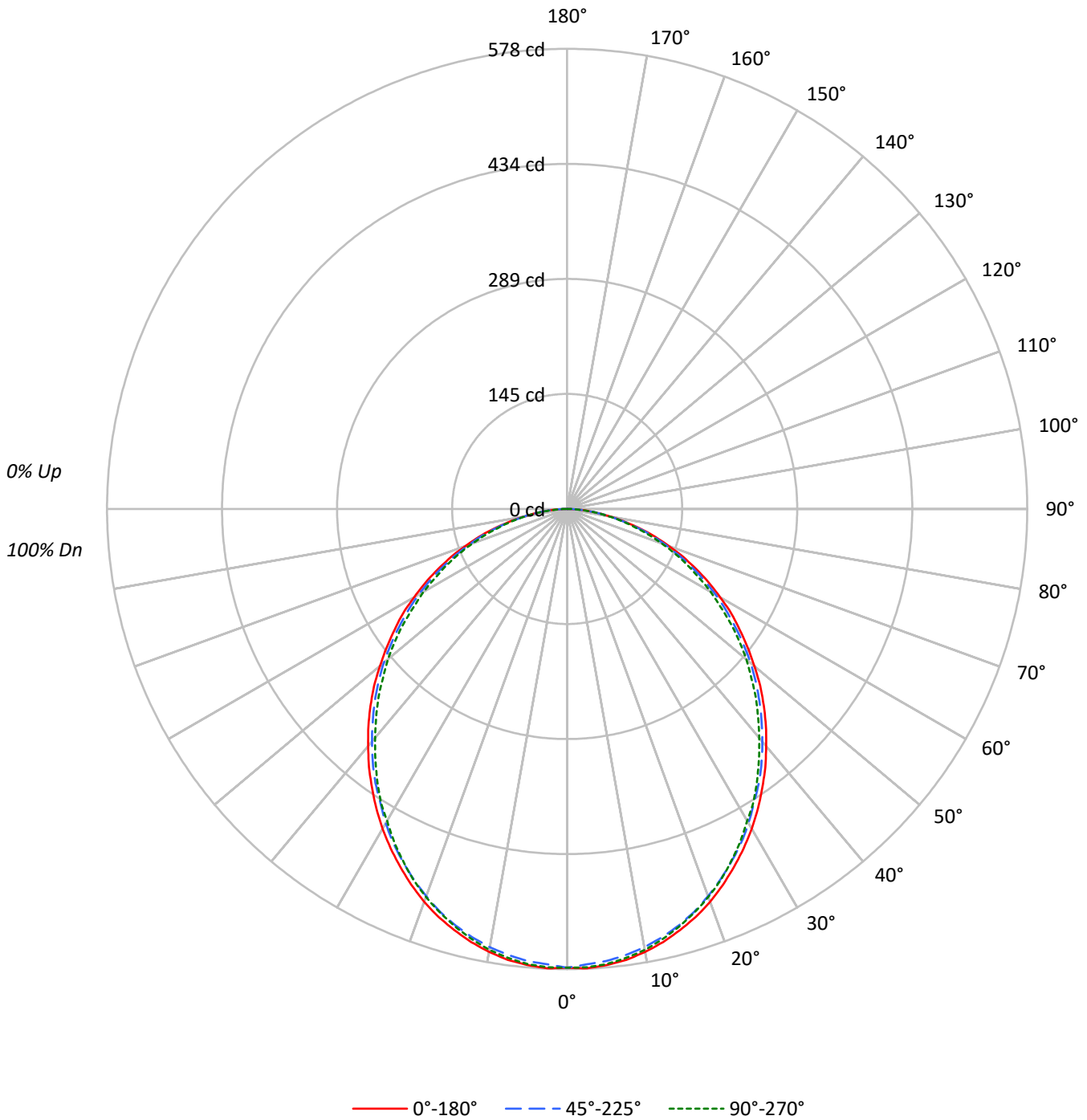
Lumens per Lamp: N/A
Luminaire Lumens: 1487.4 lumens
Efficiency: N/A
Efficacy: 132.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P243640

CATALOG NUMBER: S125DRP-H375D840-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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41
7	66	52	44	38	64	51	43	37	50	43	37	49	42	37	47	41	37
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30
10	54	41	33	28	52	40	33	27	39	32	27	38	32	27	37	31	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4095	4095	4095
5°	4102	4066	4093
10°	4076	4034	4058
15°	4029	3985	3997
20°	3972	3914	3923
25°	3889	3832	3826
30°	3806	3740	3713
35°	3708	3642	3609
40°	3608	3538	3483
45°	3510	3434	3369
50°	3393	3324	3249
55°	3279	3191	3106
60°	3154	3065	2957
65°	3007	2901	2802
70°	2820	2714	2627
75°	2601	2518	2403
80°	2267	2251	2198
85°	1965	1965	1859

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3510 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.4	3.7
10°-20°	153.4	10.3
20°-30°	226.1	15.2
30°-40°	263.4	17.7
40°-50°	263.9	17.7
50°-60°	230.7	15.5
60°-70°	171.2	11.5
70°-80°	97.1	6.5
80°-90°	27.2	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°	433.9	29.2
0°-40°	697.3	46.9
0°-60°	1191.9	80.1
0°-90°	1487.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1487.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	576	576	576	576	576	
5°	575	574	570	574	574	55
15°	548	547	542	544	543	154
25°	496	494	489	490	488	228
35°	427	425	420	417	416	267
45°	349	348	342	336	335	269
55°	265	264	258	252	251	237
65°	179	178	172	169	167	177
75°	95	93	92	90	88	100
85°	24	24	24	23	23	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	576.2	576.2	576.2	576.2	576.2
2.5°	577.5	576.6	572.4	576.6	576.2
5°	575.0	574.1	569.9	574.1	573.7
7.5°	571.2	569.9	565.2	569.5	568.6
10°	564.8	564.0	558.9	562.3	562.3
12.5°	557.2	555.9	550.9	553.8	553.4
15°	547.5	546.6	541.6	544.5	543.2
17.5°	537.3	535.2	530.6	533.1	531.4
20°	525.1	523.4	517.5	519.6	518.7
22.5°	511.1	509.0	503.5	504.8	504.4
25°	495.9	494.2	488.7	490.0	487.9
27.5°	480.3	478.1	473.1	473.1	471.0
30°	463.8	461.7	455.7	455.7	452.4
32.5°	446.0	444.3	437.1	436.7	435.9
35°	427.4	424.9	419.8	417.3	416.0
37.5°	408.8	406.7	401.2	397.8	395.7
40°	388.9	387.7	381.3	378.4	375.4
42.5°	369.5	368.2	361.5	356.4	355.1
45°	349.2	348.4	341.6	336.5	335.2
47.5°	328.9	328.1	321.3	315.8	313.7
50°	306.9	306.9	300.6	295.1	293.8
52.5°	285.8	285.4	279.0	273.5	272.3
55°	264.6	264.2	257.5	252.0	250.7
57.5°	244.8	242.2	236.3	232.1	227.9
60°	221.9	220.7	215.6	210.1	208.0
62.5°	200.8	199.1	194.0	189.4	186.4
65°	178.8	177.6	172.5	168.7	166.6
67.5°	158.1	156.4	151.3	148.4	146.7
70°	135.7	134.4	130.6	126.8	126.4
72.5°	115.8	114.1	112.0	108.6	107.0
75°	94.7	93.0	91.7	90.0	87.5
77.5°	74.4	73.6	72.7	71.4	70.2
80°	55.4	55.4	55.0	54.1	53.7
82.5°	39.3	39.7	38.5	37.6	37.6
85°	24.1	24.1	24.1	23.3	22.8
87.5°	11.8	10.6	10.6	9.7	9.7
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	16.21	17.82	16.57	18.13	18.45	15.87	17.49	16.24	17.80	18.11
	3H	17.96	19.42	18.34	19.75	20.11	17.58	19.04	17.96	19.37	19.73
	4H	18.61	19.99	19.01	20.33	20.71	18.22	19.59	18.62	19.94	20.32
	6H	19.08	20.35	19.49	20.71	21.10	18.70	19.97	19.11	20.33	20.72
	8H	19.22	20.44	19.65	20.83	21.23	18.85	20.06	19.27	20.45	20.85
	12H	19.32	20.49	19.75	20.87	21.30	18.95	20.12	19.38	20.50	20.93
4H	2H	16.78	18.15	17.18	18.50	18.88	16.51	17.89	16.91	18.23	18.61
	3H	18.76	19.91	19.17	20.31	20.71	18.44	19.59	18.85	19.99	20.39
	4H	19.54	20.58	19.97	20.99	21.43	19.21	20.25	19.64	20.66	21.10
	6H	20.13	21.03	20.58	21.48	21.93	19.81	20.72	20.26	21.16	21.62
	8H	20.32	21.17	20.78	21.62	22.08	20.01	20.86	20.47	21.30	21.77
	12H	20.47	21.23	20.95	21.71	22.18	20.15	20.92	20.63	21.39	21.86
8H	4H	19.82	20.67	20.28	21.11	21.58	19.53	20.38	19.99	20.82	21.29
	6H	20.53	21.23	21.02	21.72	22.20	20.25	20.96	20.75	21.45	21.92
	8H	20.80	21.43	21.31	21.94	22.43	20.52	21.16	21.03	21.66	22.15
	12H	21.02	21.58	21.53	22.07	22.63	20.74	21.30	21.25	21.79	22.35
12H	4H	19.85	20.61	20.33	21.09	21.56	19.56	20.33	20.04	20.80	21.27
	6H	20.58	21.21	21.09	21.72	22.20	20.31	20.95	20.82	21.45	21.94
	8H	20.91	21.47	21.41	21.96	22.52	20.64	21.20	21.15	21.69	22.25