

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: P243637

Luminaire Tested: S125DRP-H610D835-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P243637
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-H610D835-X4F0-XX-UDD-F-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

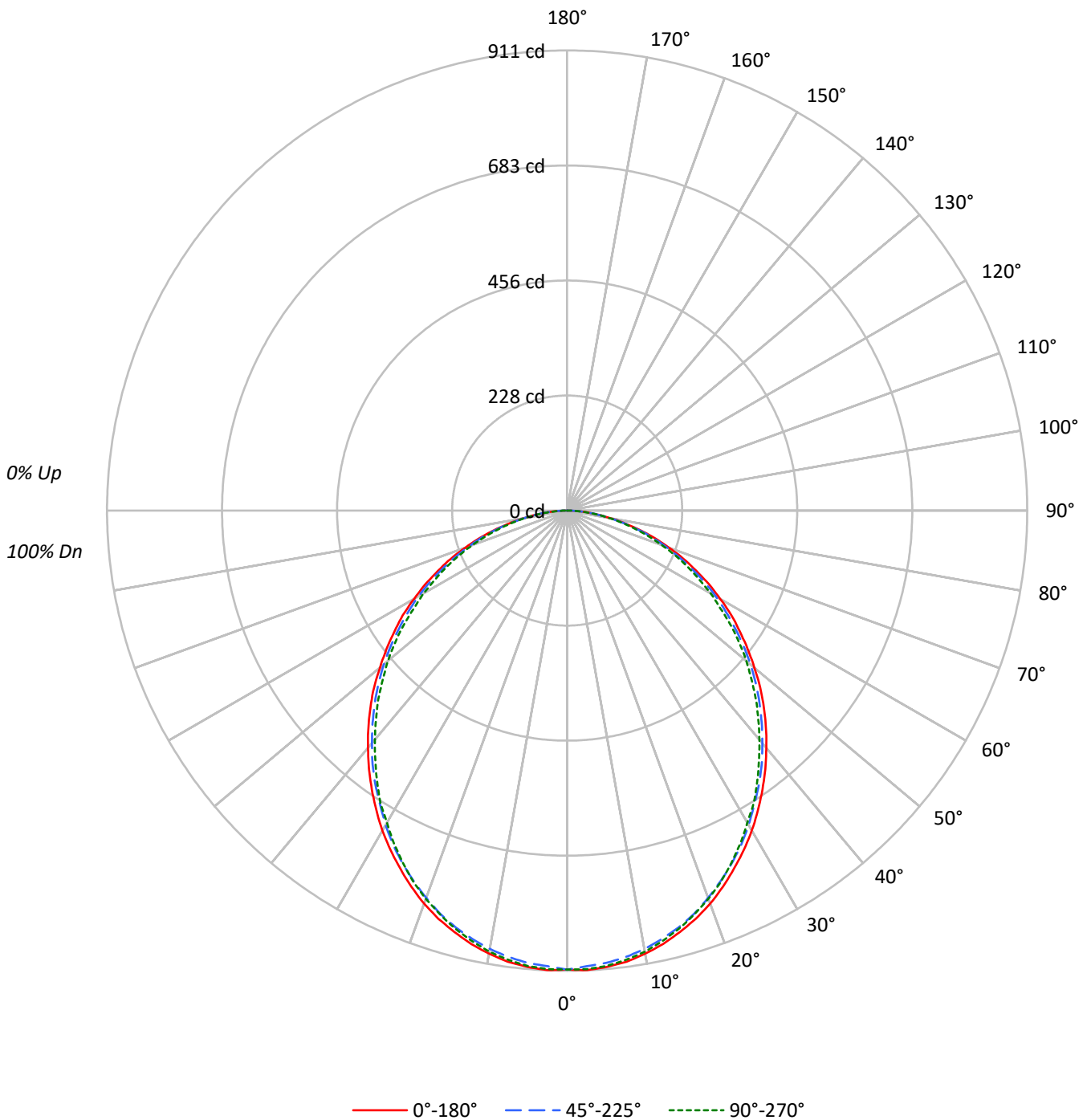
Lumens per Lamp: N/A
Luminaire Lumens: 2345.6 lumens
Efficiency: N/A
Efficacy: 136.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 17.2
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	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°	6458	6458	6458
5°	6469	6412	6455
10°	6428	6361	6399
15°	6353	6284	6304
20°	6263	6172	6187
25°	6133	6044	6034
30°	6002	5898	5854
35°	5848	5744	5692
40°	5690	5579	5493
45°	5535	5415	5314
50°	5352	5241	5123
55°	5171	5031	4898
60°	4975	4833	4662
65°	4743	4574	4418
70°	4447	4281	4142
75°	4100	3974	3790
80°	3573	3549	3467
85°	3099	3099	2936

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5535 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.7	3.7
10°-20°	241.9	10.3
20°-30°	356.6	15.2
30°-40°	415.3	17.7
40°-50°	416.1	17.7
50°-60°	363.8	15.5
60°-70°	270.0	11.5
70°-80°	153.1	6.5
80°-90°	42.9	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°	684.3	29.2
0°-40°	1099.6	46.9
0°-60°	1879.5	80.1
0°-90°	2345.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2345.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	909	909	909	909	909	
5°	907	905	899	905	905	86
15°	863	862	854	859	857	244
25°	782	779	771	773	769	360
35°	674	670	662	658	656	422
45°	551	549	539	531	529	425
55°	417	417	406	397	395	374
65°	282	280	272	266	263	280
75°	149	147	145	142	138	158
85°	38	38	38	37	36	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	908.7	908.7	908.7	908.7	908.7
2.5°	910.7	909.4	902.7	909.4	908.7
5°	906.7	905.4	898.7	905.4	904.7
7.5°	900.7	898.7	891.4	898.0	896.7
10°	890.7	889.4	881.4	886.7	886.7
12.5°	878.7	876.7	868.7	873.4	872.7
15°	863.4	862.0	854.0	858.7	856.7
17.5°	847.4	844.0	836.7	840.7	838.0
20°	828.0	825.4	816.0	819.4	818.0
22.5°	806.0	802.7	794.0	796.0	795.4
25°	782.0	779.4	770.7	772.7	769.4
27.5°	757.4	754.0	746.0	746.0	742.7
30°	731.4	728.0	718.7	718.7	713.3
32.5°	703.3	700.7	689.3	688.7	687.3
35°	674.0	670.0	662.0	658.0	656.0
37.5°	644.7	641.3	632.7	627.3	624.0
40°	613.3	611.3	601.3	596.7	592.0
42.5°	582.7	580.7	570.0	562.0	560.0
45°	550.7	549.3	538.7	530.7	528.7
47.5°	518.7	517.3	506.7	498.0	494.7
50°	484.0	484.0	474.0	465.3	463.3
52.5°	450.7	450.0	440.0	431.3	429.3
55°	417.3	416.7	406.0	397.3	395.3
57.5°	386.0	382.0	372.7	366.0	359.3
60°	350.0	348.0	340.0	331.3	328.0
62.5°	316.7	314.0	306.0	298.7	294.0
65°	282.0	280.0	272.0	266.0	262.7
67.5°	249.3	246.7	238.7	234.0	231.3
70°	214.0	212.0	206.0	200.0	199.3
72.5°	182.7	180.0	176.7	171.3	168.7
75°	149.3	146.7	144.7	142.0	138.0
77.5°	117.3	116.0	114.7	112.7	110.7
80°	87.3	87.3	86.7	85.3	84.7
82.5°	62.0	62.7	60.7	59.3	59.3
85°	38.0	38.0	38.0	36.7	36.0
87.5°	18.7	16.7	16.7	15.3	15.3
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	17.79	19.40	18.15	19.72	20.03	17.45	19.07	17.82	19.38	19.70
	3H	19.55	21.01	19.92	21.33	21.69	19.17	20.62	19.54	20.95	21.31
	4H	20.20	21.57	20.59	21.92	22.29	19.80	21.18	20.20	21.52	21.90
	6H	20.66	21.93	21.07	22.30	22.69	20.28	21.55	20.69	21.92	22.31
	8H	20.81	22.02	21.23	22.41	22.81	20.43	21.65	20.86	22.04	22.44
	12H	20.91	22.07	21.34	22.45	22.88	20.53	21.70	20.96	22.08	22.51
4H	2H	18.36	19.73	18.76	20.08	20.46	18.09	19.47	18.49	19.82	20.19
	3H	20.34	21.49	20.75	21.89	22.29	20.02	21.17	20.43	21.57	21.97
	4H	21.12	22.16	21.55	22.57	23.01	20.79	21.83	21.22	22.25	22.68
	6H	21.71	22.62	22.16	23.06	23.51	21.39	22.30	21.85	22.74	23.20
	8H	21.91	22.76	22.37	23.20	23.66	21.59	22.44	22.05	22.89	23.35
	12H	22.05	22.82	22.53	23.29	23.76	21.74	22.50	22.22	22.98	23.45
8H	4H	21.40	22.25	21.86	22.69	23.16	21.11	21.96	21.57	22.41	22.87
	6H	22.11	22.82	22.60	23.31	23.78	21.83	22.54	22.33	23.03	23.51
	8H	22.38	23.02	22.89	23.52	24.01	22.11	22.74	22.62	23.25	23.73
	12H	22.60	23.16	23.11	23.65	24.22	22.32	22.88	22.83	23.37	23.94
12H	4H	21.43	22.19	21.91	22.67	23.14	21.15	21.91	21.63	22.39	22.86
	6H	22.16	22.79	22.67	23.30	23.79	21.89	22.53	22.40	23.04	23.52
	8H	22.49	23.05	23.00	23.54	24.10	22.22	22.78	22.73	23.27	23.83