

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: P243648

Luminaire Tested: S125DRP-H1090D930-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P243648
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-H1090D930-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

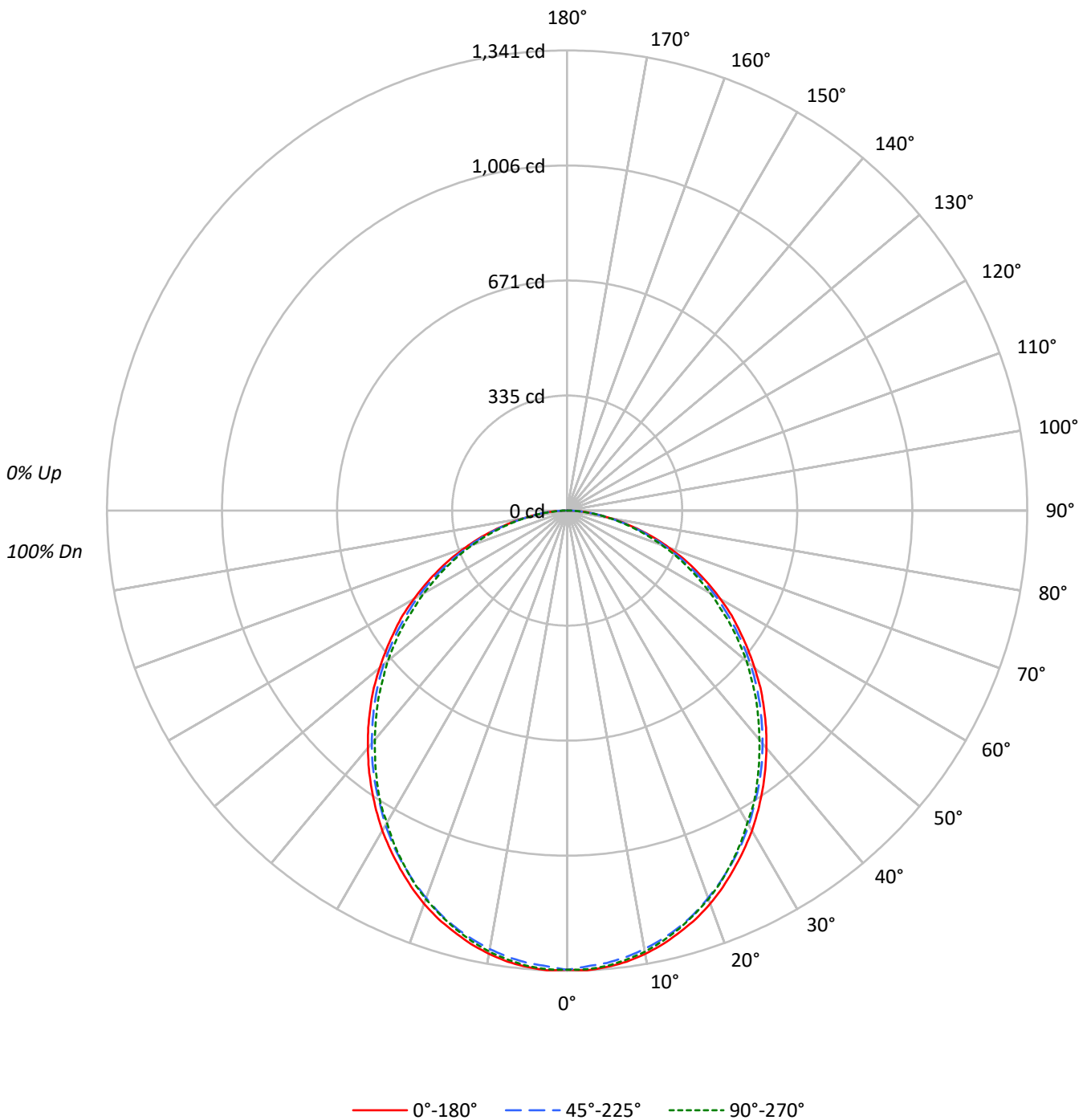
Lumens per Lamp: N/A
Luminaire Lumens: 3453.9 lumens
Efficiency: N/A
Efficacy: 109.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 31.5
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	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°	9510	9510	9510
5°	9525	9441	9505
10°	9466	9366	9423
15°	9354	9254	9282
20°	9222	9088	9110
25°	9030	8899	8884
30°	8838	8685	8620
35°	8611	8458	8381
40°	8380	8216	8089
45°	8151	7973	7825
50°	7880	7718	7544
55°	7614	7409	7213
60°	7326	7117	6866
65°	6984	6735	6505
70°	6548	6303	6099
75°	6039	5849	5580
80°	5264	5223	5104
85°	4567	4567	4322

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8151 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.2	3.7
10°-20°	356.2	10.3
20°-30°	525.1	15.2
30°-40°	611.5	17.7
40°-50°	612.8	17.7
50°-60°	535.7	15.5
60°-70°	397.6	11.5
70°-80°	225.5	6.5
80°-90°	63.2	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°	1007.6	29.2
0°-40°	1619.1	46.9
0°-60°	2767.6	80.1
0°-90°	3453.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3453.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1338	1338	1338	1338	1338	
5°	1335	1333	1323	1333	1332	127
15°	1271	1269	1258	1264	1262	359
25°	1152	1148	1135	1138	1133	531
35°	992	987	975	969	966	621
45°	811	809	793	781	778	625
55°	614	614	598	585	582	550
65°	415	412	400	392	387	412
75°	220	216	213	209	203	233
85°	56	56	56	54	53	65
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1338.1	1338.1	1338.1	1338.1	1338.1
2.5°	1341.0	1339.0	1329.2	1339.0	1338.1
5°	1335.1	1333.2	1323.3	1333.2	1332.2
7.5°	1326.3	1323.3	1312.5	1322.4	1320.4
10°	1311.6	1309.6	1297.8	1305.7	1305.7
12.5°	1293.9	1290.9	1279.2	1286.0	1285.0
15°	1271.3	1269.3	1257.6	1264.4	1261.5
17.5°	1247.7	1242.8	1232.0	1237.9	1234.0
20°	1219.3	1215.3	1201.6	1206.5	1204.5
22.5°	1186.9	1182.0	1169.2	1172.2	1171.2
25°	1151.5	1147.6	1134.8	1137.8	1132.9
27.5°	1115.2	1110.3	1098.5	1098.5	1093.6
30°	1076.9	1072.0	1058.3	1058.3	1050.4
32.5°	1035.7	1031.8	1015.1	1014.1	1012.1
35°	992.5	986.6	974.8	968.9	966.0
37.5°	949.3	944.4	931.6	923.8	918.9
40°	903.2	900.2	885.5	878.6	871.8
42.5°	858.0	855.1	839.4	827.6	824.6
45°	810.9	808.9	793.2	781.4	778.5
47.5°	763.8	761.8	746.1	733.3	728.4
50°	712.7	712.7	698.0	685.2	682.3
52.5°	663.6	662.6	647.9	635.2	632.2
55°	614.5	613.6	597.9	585.1	582.1
57.5°	568.4	562.5	548.8	539.0	529.1
60°	515.4	512.4	500.7	487.9	483.0
62.5°	466.3	462.4	450.6	439.8	432.9
65°	415.3	412.3	400.5	391.7	386.8
67.5°	367.2	363.2	351.4	344.6	340.7
70°	315.1	312.2	303.3	294.5	293.5
72.5°	269.0	265.1	260.2	252.3	248.4
75°	219.9	216.0	213.0	209.1	203.2
77.5°	172.8	170.8	168.9	165.9	163.0
80°	128.6	128.6	127.6	125.7	124.7
82.5°	91.3	92.3	89.3	87.4	87.4
85°	56.0	56.0	56.0	54.0	53.0
87.5°	27.5	24.5	24.5	22.6	22.6
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	19.13	20.75	19.50	21.06	21.38	18.80	20.41	19.16	20.73	21.04
	3H	20.89	22.35	21.27	22.68	23.04	20.51	21.97	20.89	22.30	22.66
	4H	21.54	22.91	21.94	23.26	23.64	21.15	22.52	21.55	22.87	23.25
	6H	22.00	23.28	22.41	23.64	24.03	21.62	22.90	22.03	23.26	23.65
	8H	22.15	23.37	22.58	23.76	24.15	21.78	22.99	22.20	23.38	23.78
	12H	22.25	23.42	22.68	23.80	24.23	21.88	23.04	22.31	23.42	23.85
4H	2H	19.71	21.08	20.10	21.43	21.80	19.44	20.81	19.84	21.16	21.54
	3H	21.69	22.84	22.10	23.24	23.64	21.37	22.52	21.78	22.92	23.32
	4H	22.46	23.50	22.89	23.92	24.35	22.14	23.18	22.57	23.59	24.03
	6H	23.05	23.96	23.51	24.40	24.86	22.74	23.65	23.19	24.09	24.54
	8H	23.25	24.10	23.71	24.54	25.01	22.94	23.79	23.40	24.23	24.70
	12H	23.40	24.16	23.88	24.64	25.11	23.08	23.85	23.56	24.32	24.79
8H	4H	22.75	23.60	23.21	24.04	24.50	22.46	23.31	22.92	23.75	24.22
	6H	23.45	24.16	23.95	24.65	25.13	23.18	23.89	23.67	24.37	24.85
	8H	23.73	24.36	24.24	24.87	25.35	23.45	24.09	23.96	24.59	25.08
	12H	23.95	24.51	24.45	25.00	25.56	23.67	24.23	24.17	24.72	25.28
12H	4H	22.77	23.54	23.25	24.01	24.48	22.49	23.26	22.97	23.73	24.20
	6H	23.50	24.14	24.01	24.65	25.13	23.24	23.87	23.75	24.38	24.87
	8H	23.83	24.40	24.34	24.89	25.45	23.57	24.13	24.07	24.62	25.18