

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: P242769

Luminaire Tested: S125DRP-S1090D927-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P242769
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-12)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DRP-S1090D927-X4F0-XX-UDD-F-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

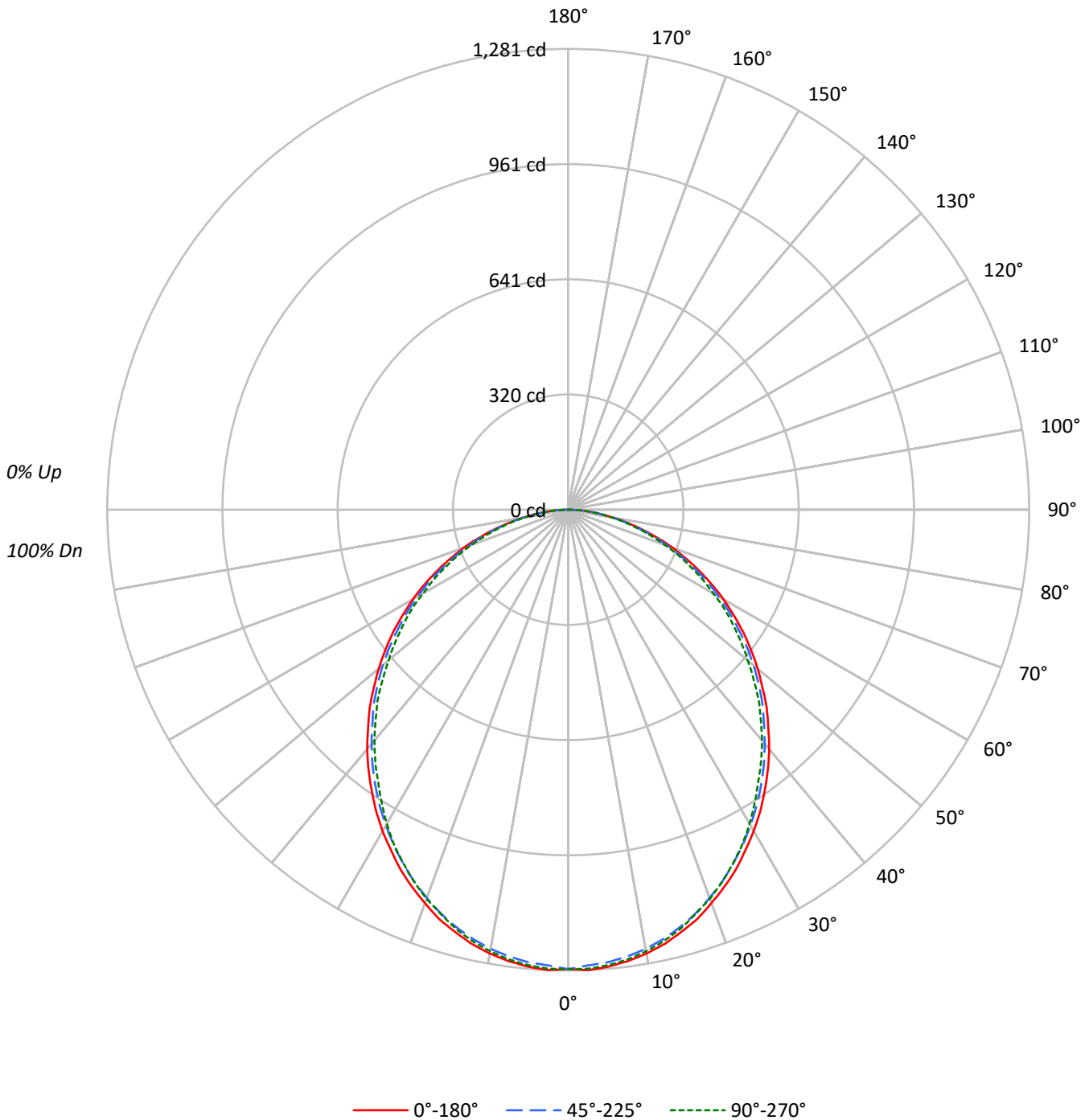
Lumens per Lamp: N/A
Luminaire Lumens: 3323.5 lumens
Efficiency: N/A
Efficacy: 95.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 34.8
Input Voltage (V): 120
Input Current (A_{in}): 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	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	94	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	72	70																												
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	59																												
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51																												
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44																												
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	39																												
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34																												
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31																												
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28																												
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9075	9075	9075
5°	9096	9009	9067
10°	9041	8945	8997
15°	8942	8839	8875
20°	8802	8687	8703
25°	8651	8509	8501
30°	8465	8316	8274
35°	8265	8108	7994
40°	8061	7883	7770
45°	7839	7676	7524
50°	7596	7428	7205
55°	7360	7147	6948
60°	7079	6864	6620
65°	6745	6523	6303
70°	6423	6130	5920
75°	5855	5660	5465
80°	5210	5128	5002
85°	4534	4616	4363

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7839 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.5	3.6
10°-20°	340.4	10.2
20°-30°	502.5	15.1
30°-40°	586.2	17.6
40°-50°	588.8	17.7
50°-60°	516.9	15.6
60°-70°	385.0	11.6
70°-80°	219.9	6.6
80°-90°	63.5	1.9
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°	963.3	29.0
0°-40°	1549.6	46.6
0°-60°	2655.2	79.9
0°-90°	3323.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3323.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1277	1277	1277	1277	1277	
5°	1275	1273	1263	1272	1271	121
15°	1215	1212	1201	1206	1206	343
25°	1103	1098	1085	1087	1084	508
35°	953	949	934	929	921	596
45°	780	776	764	752	749	601
55°	594	591	577	568	561	530
65°	401	399	388	379	375	398
75°	213	211	206	203	199	227
85°	56	57	57	56	54	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1276.9	1276.9	1276.9	1276.9	1276.9
2.5°	1281.0	1277.9	1267.8	1277.9	1276.9
5°	1274.9	1272.9	1262.8	1271.9	1270.9
7.5°	1265.8	1263.8	1252.7	1261.8	1260.8
10°	1252.7	1250.7	1239.5	1247.6	1246.6
12.5°	1236.5	1232.5	1222.4	1228.4	1228.4
15°	1215.3	1212.3	1201.2	1206.2	1206.2
17.5°	1193.1	1188.0	1176.9	1183.0	1177.9
20°	1163.8	1161.8	1148.6	1155.7	1150.6
22.5°	1134.5	1130.4	1118.3	1122.4	1119.3
25°	1103.2	1098.1	1085.0	1087.0	1084.0
27.5°	1066.8	1063.8	1050.6	1051.6	1048.6
30°	1031.4	1028.4	1013.3	1011.2	1008.2
32.5°	993.1	988.0	974.9	970.8	964.8
35°	952.6	948.6	934.5	929.4	921.3
37.5°	911.2	906.2	893.0	886.0	880.9
40°	868.8	863.7	849.6	840.5	837.5
42.5°	823.3	819.3	805.2	797.1	792.0
45°	779.9	775.9	763.7	751.6	748.6
47.5°	732.4	733.4	718.3	706.1	699.1
50°	687.0	683.9	671.8	658.7	651.6
52.5°	640.5	638.5	625.3	614.2	606.1
55°	594.0	591.0	576.8	567.7	560.7
57.5°	544.5	543.5	531.4	519.3	516.2
60°	498.0	494.0	482.9	472.8	465.7
62.5°	449.6	446.5	437.4	426.3	421.3
65°	401.1	399.0	387.9	378.8	374.8
67.5°	353.6	349.5	341.5	333.4	331.4
70°	309.1	304.1	295.0	288.9	284.9
72.5°	260.6	257.6	252.6	245.5	241.4
75°	213.2	211.1	206.1	203.1	199.0
77.5°	168.7	167.7	164.7	162.6	159.6
80°	127.3	127.3	125.3	124.3	122.2
82.5°	90.9	88.9	88.9	86.9	86.9
85°	55.6	56.6	56.6	55.6	53.5
87.5°	27.3	27.3	26.3	26.3	24.2
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	19.01	20.63	19.38	20.94	21.26	18.69	20.30	19.05	20.62	20.93
	3H	20.78	22.24	21.16	22.57	22.93	20.42	21.88	20.79	22.21	22.57
	4H	21.44	22.82	21.84	23.16	23.54	21.06	22.44	21.46	22.79	23.16
	6H	21.92	23.19	22.33	23.56	23.95	21.55	22.83	21.96	23.19	23.58
	8H	22.07	23.29	22.50	23.68	24.08	21.71	22.93	22.14	23.32	23.72
	12H	22.18	23.35	22.61	23.73	24.16	21.82	22.99	22.25	23.37	23.80
4H	2H	19.59	20.97	19.99	21.32	21.69	19.33	20.71	19.73	21.06	21.43
	3H	21.59	22.74	22.00	23.14	23.54	21.28	22.44	21.69	22.84	23.24
	4H	22.37	23.42	22.80	23.83	24.27	22.06	23.10	22.49	23.52	23.95
	6H	22.98	23.89	23.43	24.33	24.79	22.67	23.59	23.13	24.03	24.48
	8H	23.19	24.04	23.65	24.48	24.95	22.88	23.74	23.34	24.18	24.64
	12H	23.34	24.11	23.82	24.58	25.05	23.04	23.80	23.52	24.28	24.75
8H	4H	22.66	23.51	23.12	23.96	24.42	22.38	23.24	22.84	23.68	24.14
	6H	23.39	24.10	23.88	24.59	25.06	23.12	23.83	23.61	24.32	24.79
	8H	23.67	24.30	24.18	24.81	25.30	23.40	24.04	23.91	24.55	25.03
	12H	23.90	24.46	24.40	24.95	25.51	23.64	24.20	24.14	24.69	25.25
12H	4H	22.69	23.46	23.17	23.93	24.40	22.42	23.19	22.90	23.66	24.13
	6H	23.44	24.08	23.95	24.59	25.07	23.18	23.82	23.69	24.33	24.81
	8H	23.78	24.34	24.28	24.83	25.39	23.53	24.09	24.03	24.58	25.14