

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: P242858

Luminaire Tested: S125DRP-S1270D930-X4F0-XX-UDD-D-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P242858
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-17)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DRP-S1270D930-X4F0-XX-UDD-D-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN DROP DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

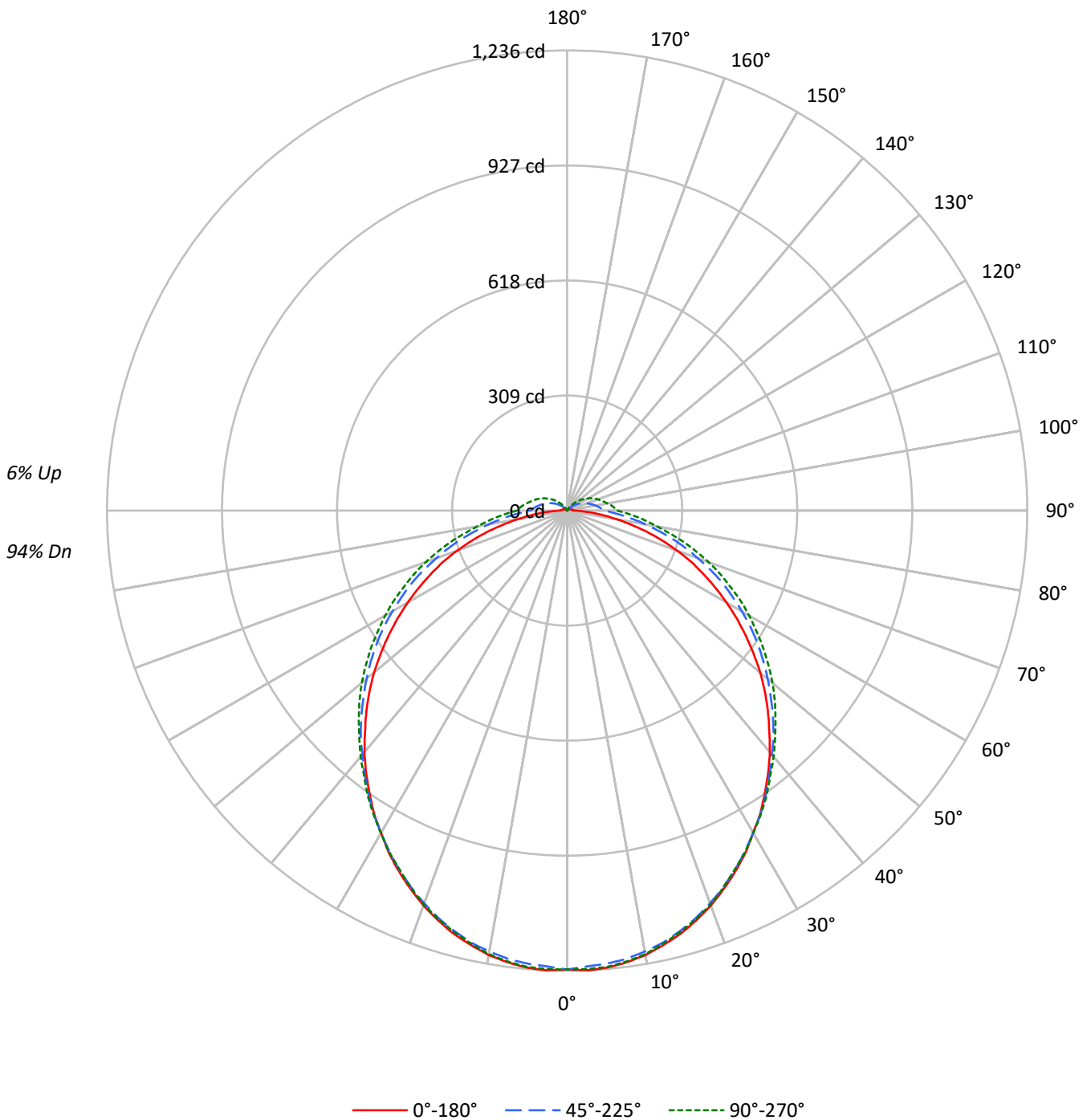
Lumens per Lamp: N/A
Luminaire Lumens: 3818.1 lumens
Efficiency: N/A
Efficacy: 92.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.39' x L: 3.88' x H: 0.08')
CIE Type: Direct

Input Watts (W): 41.1
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	0	
RCR																						
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96	94				
1	106	101	96	92	103	98	94	90	93	89	86	88	85	82	83	81	79	76				
2	96	88	80	74	93	85	78	73	81	75	70	76	72	68	72	69	65	63				
3	88	77	68	61	84	75	67	60	71	64	59	67	61	57	64	59	55	53				
4	80	68	59	52	77	66	58	51	63	55	50	60	53	48	57	51	47	45				
5	74	60	51	44	71	59	50	44	56	49	43	53	47	42	51	45	41	39				
6	68	54	45	39	66	53	45	38	51	43	38	48	42	37	46	40	36	34				
7	63	49	40	34	61	48	40	34	46	39	33	44	37	33	42	36	32	30				
8	59	45	36	30	57	44	36	30	42	35	30	40	34	29	39	33	29	27				
9	55	41	33	27	53	40	33	27	39	32	27	37	31	26	36	30	26	24				
10	51	38	30	25	50	37	30	25	36	29	24	35	28	24	33	28	23	22				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8760	8760	8760
5°	8777	8591	8615
10°	8714	8430	8413
15°	8610	8240	8158
20°	8470	8006	7905
25°	8303	7758	7593
30°	8101	7484	7311
35°	7912	7232	7051
40°	7719	6967	6790
45°	7503	6740	6557
50°	7295	6492	6350
55°	7045	6258	6106
60°	6773	5990	5858
65°	6488	5710	5578
70°	6165	5329	5289
75°	5651	4958	4933
80°	4980	4510	4545
85°	4353	4183	4387

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7503 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.6	3.1
10°-20°	331.1	8.7
20°-30°	492.3	12.9
30°-40°	583.1	15.3
40°-50°	602.8	15.8
50°-60°	555.3	14.5
60°-70°	448.9	11.8
70°-80°	300.4	7.9
80°-90°	155.3	4.1
90°-100°	87.5	2.3
100°-110°	64.5	1.7
110°-120°	43.2	1.1
120°-130°	24.4	0.6
130°-140°	10.7	0.3
140°-150°	2.1	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	940.1	24.6
0°-40°	1523.1	39.9
0°-60°	2681.2	70.2
0°-90°	3585.8	93.9
90°-120°	195.1	5.1
90°-150°	232.3	6.1
90°-180°	232.0	6.1
0°-180°	3818.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1232	1232	1232	1232	1232	
5°	1232	1230	1222	1231	1230	117
15°	1177	1178	1170	1177	1172	332
25°	1069	1073	1066	1071	1064	492
35°	926	934	930	934	934	579
45°	762	776	782	790	792	588
55°	586	605	625	638	643	524
65°	404	431	460	478	483	401
75°	222	254	292	317	323	236
85°	66	106	149	175	185	69
90°	19	58	99	127	135	13
95°	16	47	88	115	123	12
105°	11	30	66	91	99	12
115°	7	16	47	69	76	7
125°	5	4	28	47	53	4
135°	2	1	10	25	31	2
145°	1	0	0	6	11	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1232.5	1232.5	1232.5	1232.5	1232.5
2.5°	1236.1	1233.7	1225.3	1233.7	1232.5
5°	1232.5	1230.1	1221.6	1231.3	1230.1
7.5°	1224.0	1222.8	1214.4	1222.8	1221.6
10°	1212.0	1212.0	1202.3	1210.8	1209.5
12.5°	1195.0	1196.3	1189.0	1195.0	1191.4
15°	1176.9	1178.1	1169.7	1176.9	1172.1
17.5°	1154.0	1156.4	1147.9	1154.0	1150.3
20°	1128.6	1131.0	1122.5	1126.2	1126.2
22.5°	1099.6	1104.4	1094.8	1099.6	1096.0
25°	1069.4	1073.0	1065.8	1070.6	1064.5
27.5°	1036.8	1041.6	1033.1	1036.8	1034.3
30°	999.3	1006.5	999.3	1001.7	1000.5
32.5°	965.5	971.5	966.7	969.1	967.9
35°	925.6	934.0	930.4	934.0	934.0
37.5°	886.9	894.2	893.0	897.8	896.6
40°	847.0	856.7	855.5	860.3	862.8
42.5°	803.5	816.8	820.5	826.5	826.5
45°	762.5	775.8	781.8	790.3	791.5
47.5°	720.2	732.3	741.9	754.0	756.4
50°	676.7	690.0	703.3	716.5	720.2
52.5°	630.8	647.7	664.6	679.1	681.5
55°	586.0	605.4	624.7	638.0	642.8
57.5°	540.1	563.1	584.8	599.3	603.0
60°	494.2	518.4	542.5	560.7	564.3
62.5°	449.5	473.7	500.3	520.8	525.6
65°	403.6	431.4	460.4	478.5	483.3
67.5°	361.3	387.9	416.9	438.6	444.7
70°	314.2	342.0	373.4	396.3	403.6
72.5°	268.3	297.3	332.3	357.7	362.5
75°	222.3	253.8	292.4	316.6	322.6
77.5°	177.6	213.9	250.1	276.7	281.5
80°	136.5	172.8	213.9	240.5	245.3
82.5°	99.1	137.8	180.0	205.4	215.1
85°	66.5	106.3	148.6	175.2	184.9
87.5°	42.3	81.0	122.0	149.8	158.3
90°	19.3	58.0	99.1	126.9	135.3
92.5°	16.9	52.0	94.3	120.8	129.3
95°	15.7	47.1	88.2	114.8	123.3
97.5°	14.5	43.5	83.4	108.8	117.2
100°	13.3	38.7	77.3	102.7	110.0
102.5°	12.1	35.0	72.5	96.7	103.9
105°	10.9	30.2	66.5	90.6	99.1
107.5°	9.7	26.6	61.6	85.8	93.0
110°	8.5	23.0	56.8	79.8	88.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	8.5	19.3	52.0	73.7	82.2
115°	7.3	15.7	47.1	68.9	76.1
117.5°	6.0	12.1	42.3	62.8	71.3
120°	6.0	9.7	37.5	58.0	65.3
122.5°	4.8	6.0	32.6	52.0	59.2
125°	4.8	3.6	27.8	47.1	53.2
127.5°	3.6	2.4	23.0	41.1	48.3
130°	3.6	2.4	19.3	36.3	42.3
132.5°	2.4	2.4	14.5	31.4	36.3
135°	2.4	1.2	9.7	25.4	31.4
137.5°	2.4	1.2	6.0	20.5	25.4
140°	1.2	1.2	2.4	15.7	20.5
142.5°	1.2	0.0	0.0	10.9	15.7
145°	1.2	0.0	0.0	6.0	10.9
147.5°	0.0	0.0	0.0	2.4	4.8
150°	0.0	0.0	0.0	0.0	1.2
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	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	17.46	18.99	17.92	19.43	19.89	18.50	20.03	18.96	20.47	20.93
	3H	19.11	20.50	19.58	20.95	21.46	20.68	22.07	21.15	22.52	23.03
	4H	19.68	21.00	20.17	21.46	21.98	21.64	22.96	22.13	23.43	23.95
	6H	20.06	21.28	20.56	21.76	22.30	22.54	23.76	23.04	24.24	24.78
	8H	20.16	21.33	20.68	21.84	22.38	22.97	24.14	23.49	24.65	25.19
	12H	20.22	21.35	20.75	21.85	22.42	23.43	24.55	23.95	25.05	25.62
4H	2H	18.22	19.54	18.71	20.01	20.52	19.03	20.35	19.53	20.82	21.34
	3H	20.10	21.22	20.60	21.73	22.27	21.43	22.54	21.93	23.06	23.60
	4H	20.80	21.82	21.33	22.34	22.92	22.54	23.56	23.06	24.08	24.66
	6H	21.31	22.21	21.85	22.76	23.35	23.60	24.50	24.15	25.05	25.64
	8H	21.46	22.30	22.01	22.85	23.45	24.12	24.97	24.67	25.51	26.12
	12H	21.56	22.32	22.13	22.90	23.51	24.68	25.44	25.25	26.02	26.63
8H	4H	21.28	22.13	21.83	22.68	23.28	22.80	23.64	23.35	24.19	24.79
	6H	21.95	22.66	22.53	23.25	23.86	24.02	24.73	24.60	25.32	25.93
	8H	22.19	22.83	22.78	23.43	24.05	24.66	25.30	25.26	25.90	26.52
	12H	22.37	22.94	22.97	23.53	24.22	25.37	25.94	25.97	26.53	27.22
12H	4H	21.38	22.15	21.96	22.72	23.33	22.82	23.58	23.39	24.16	24.76
	6H	22.11	22.75	22.71	23.35	23.98	24.07	24.71	24.67	25.31	25.93
	8H	22.43	23.00	23.03	23.59	24.28	24.78	25.34	25.37	25.94	26.62