

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: P243649

Luminaire Tested: S125DRP-H1270D930-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P243649
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-H1270D930-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

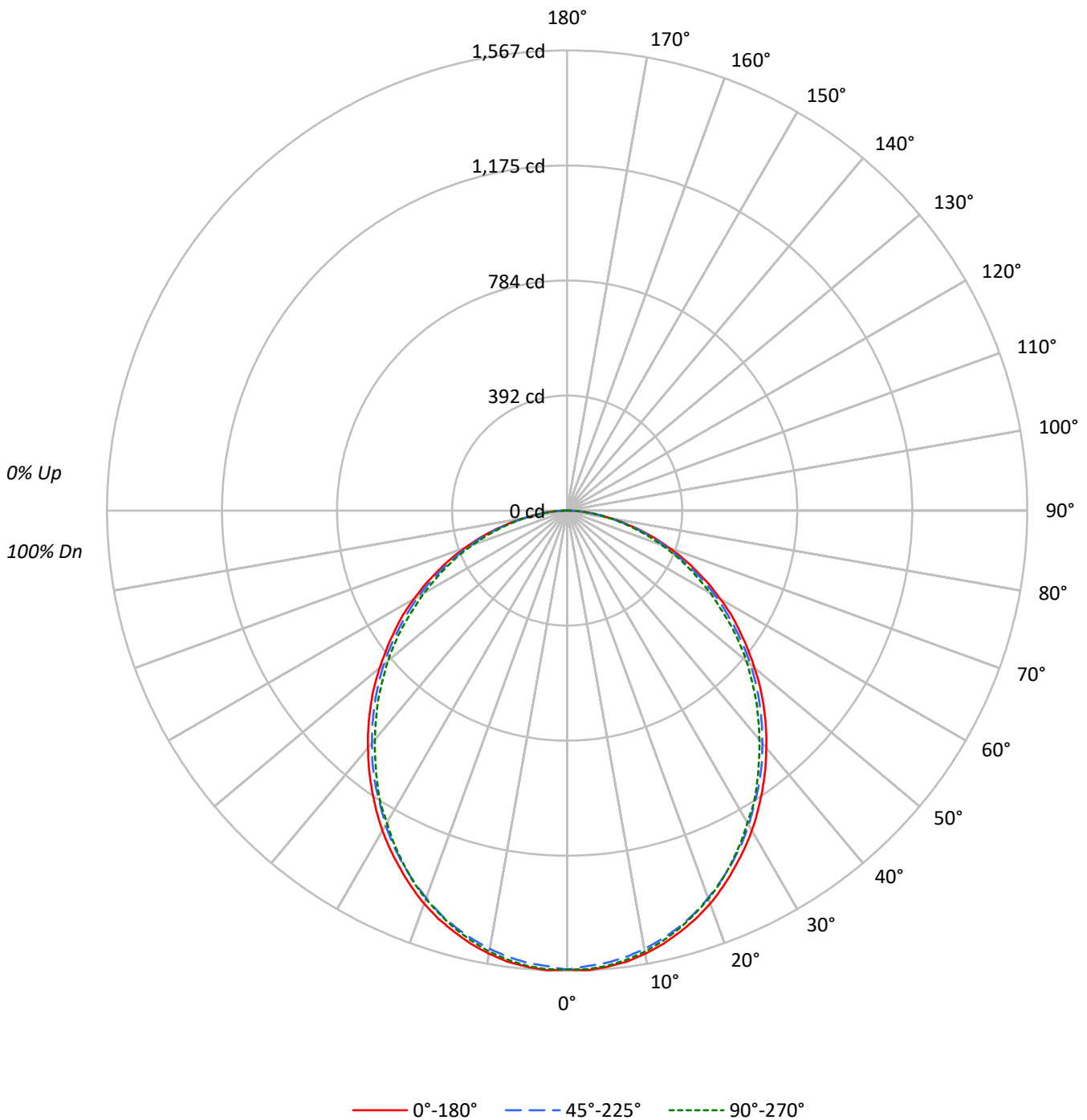
Lumens per Lamp: N/A
Luminaire Lumens: 4034.9 lumens
Efficiency: N/A
Efficacy: 107.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 37.7
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	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	95	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	73	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41	39
7	66	52	44	38	64	51	43	37	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11109	11109	11109
5°	11128	11029	11103
10°	11057	10942	11008
15°	10927	10810	10844
20°	10773	10617	10643
25°	10549	10396	10378
30°	10325	10146	10071
35°	10059	9881	9791
40°	9789	9597	9449
45°	9522	9314	9141
50°	9206	9016	8812
55°	8896	8654	8427
60°	8559	8314	8020
65°	8158	7869	7598
70°	7649	7365	7126
75°	7055	6835	6519
80°	6148	6103	5959
85°	5333	5333	5048

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9522 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.5	3.7
10°-20°	416.1	10.3
20°-30°	613.5	15.2
30°-40°	714.4	17.7
40°-50°	715.9	17.7
50°-60°	625.8	15.5
60°-70°	464.4	11.5
70°-80°	263.4	6.5
80°-90°	73.9	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°	1177.1	29.2
0°-40°	1891.5	46.9
0°-60°	3233.1	80.1
0°-90°	4034.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4034.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1563	1563	1563	1563	1563	
5°	1560	1557	1546	1557	1556	148
15°	1485	1483	1469	1477	1474	419
25°	1345	1341	1326	1329	1323	620
35°	1159	1152	1139	1132	1128	725
45°	947	945	927	913	909	731
55°	718	717	698	684	680	643
65°	485	482	468	458	452	481
75°	257	252	249	244	237	272
85°	65	65	65	63	62	76
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1563.1	1563.1	1563.1	1563.1	1563.1
2.5°	1566.6	1564.3	1552.8	1564.3	1563.1
5°	1559.7	1557.4	1545.9	1557.4	1556.2
7.5°	1549.3	1545.9	1533.3	1544.8	1542.5
10°	1532.1	1529.9	1516.1	1525.3	1525.3
12.5°	1511.5	1508.1	1494.3	1502.3	1501.2
15°	1485.1	1482.8	1469.1	1477.1	1473.7
17.5°	1457.6	1451.9	1439.3	1446.1	1441.5
20°	1424.3	1419.8	1403.7	1409.4	1407.1
22.5°	1386.5	1380.8	1365.9	1369.3	1368.2
25°	1345.2	1340.6	1325.7	1329.2	1323.4
27.5°	1302.8	1297.0	1283.3	1283.3	1277.6
30°	1258.1	1252.3	1236.3	1236.3	1227.1
32.5°	1209.9	1205.3	1185.8	1184.7	1182.4
35°	1159.4	1152.5	1138.8	1131.9	1128.5
37.5°	1109.0	1103.2	1088.3	1079.2	1073.4
40°	1055.1	1051.6	1034.4	1026.4	1018.4
42.5°	1002.3	998.9	980.5	966.8	963.3
45°	947.3	945.0	926.6	912.9	909.4
47.5°	892.2	889.9	871.6	856.7	850.9
50°	832.6	832.6	815.4	800.5	797.0
52.5°	775.2	774.1	756.9	742.0	738.5
55°	717.9	716.8	698.4	683.5	680.1
57.5°	664.0	657.1	641.1	629.6	618.1
60°	602.1	598.6	584.9	570.0	564.2
62.5°	544.7	540.2	526.4	513.8	505.7
65°	485.1	481.7	467.9	457.6	451.8
67.5°	428.9	424.3	410.6	402.5	397.9
70°	368.1	364.7	354.4	344.0	342.9
72.5°	314.2	309.6	303.9	294.7	290.1
75°	256.9	252.3	248.9	244.3	237.4
77.5°	201.8	199.5	197.3	193.8	190.4
80°	150.2	150.2	149.1	146.8	145.6
82.5°	106.7	107.8	104.4	102.1	102.1
85°	65.4	65.4	65.4	63.1	61.9
87.5°	32.1	28.7	28.7	26.4	26.4
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	19.67	21.29	20.04	21.60	21.92	19.34	20.95	19.70	21.27	21.58
	3H	21.43	22.89	21.81	23.22	23.58	21.05	22.51	21.43	22.84	23.20
	4H	22.08	23.45	22.48	23.80	24.18	21.69	23.06	22.09	23.41	23.78
	6H	22.54	23.82	22.95	24.18	24.57	22.16	23.44	22.57	23.80	24.19
	8H	22.69	23.91	23.12	24.30	24.69	22.32	23.53	22.74	23.92	24.32
	12H	22.79	23.96	23.22	24.34	24.77	22.42	23.58	22.85	23.96	24.39
4H	2H	20.25	21.62	20.64	21.97	22.34	19.98	21.35	20.38	21.70	22.08
	3H	22.23	23.38	22.64	23.78	24.18	21.91	23.06	22.32	23.46	23.86
	4H	23.00	24.04	23.43	24.46	24.89	22.68	23.72	23.11	24.13	24.57
	6H	23.59	24.50	24.05	24.94	25.40	23.28	24.19	23.73	24.63	25.08
	8H	23.79	24.64	24.25	25.08	25.55	23.48	24.33	23.94	24.77	25.24
	12H	23.94	24.70	24.42	25.18	25.65	23.62	24.39	24.10	24.86	25.33
8H	4H	23.29	24.14	23.75	24.58	25.04	23.00	23.85	23.46	24.29	24.76
	6H	23.99	24.70	24.49	25.19	25.66	23.72	24.43	24.21	24.91	25.39
	8H	24.27	24.90	24.78	25.41	25.89	23.99	24.62	24.50	25.13	25.62
	12H	24.49	25.05	24.99	25.54	26.10	24.21	24.77	24.71	25.26	25.82
12H	4H	23.31	24.08	23.79	24.55	25.02	23.03	23.80	23.51	24.27	24.74
	6H	24.04	24.68	24.55	25.19	25.67	23.78	24.41	24.29	24.92	25.41
	8H	24.37	24.93	24.88	25.43	25.99	24.11	24.67	24.61	25.16	25.72