

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: P242789

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P242789
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-S1270D930-X4F0-XX-UDD-F-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

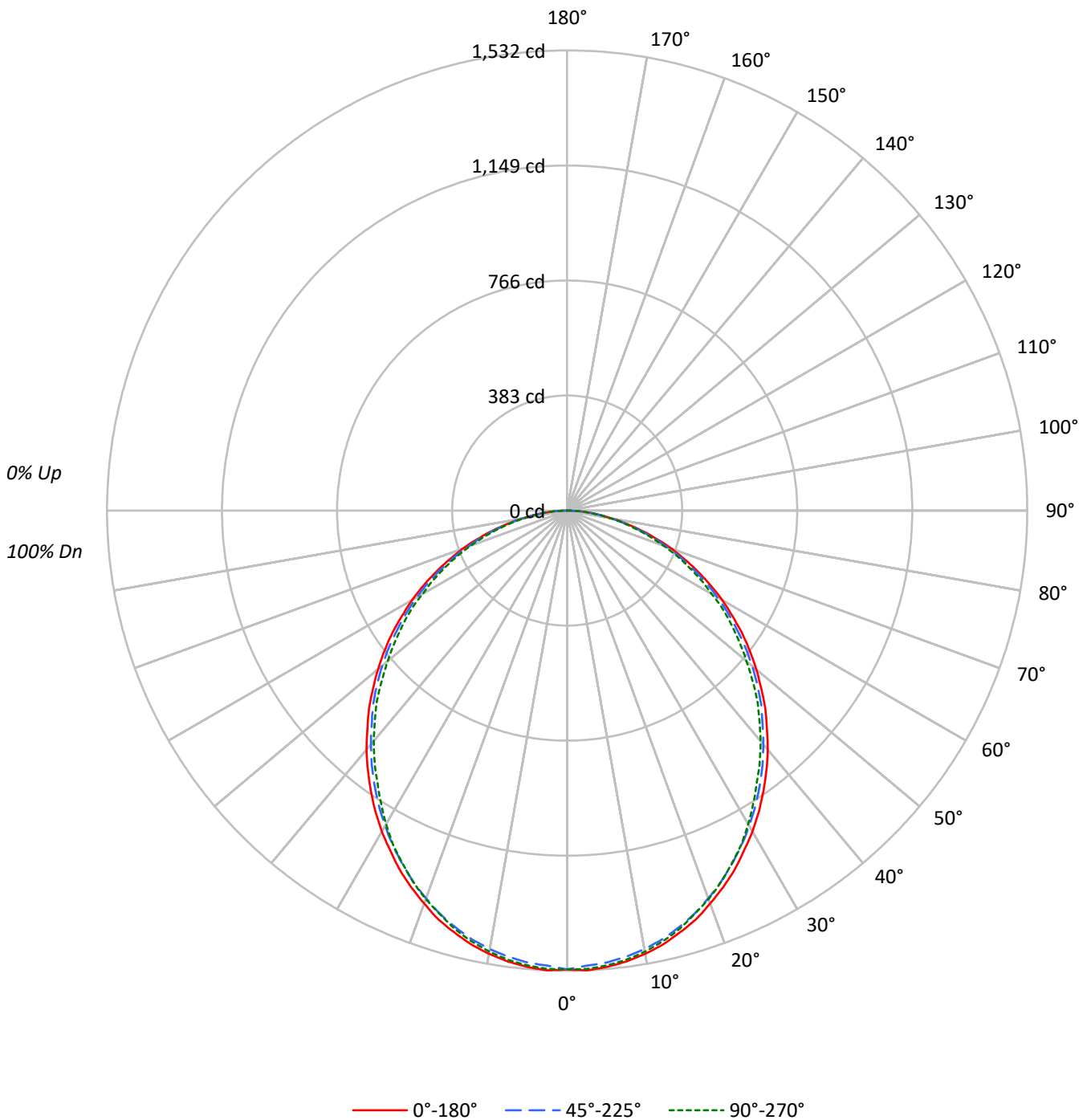
Lumens per Lamp: N/A
Luminaire Lumens: 3975.3 lumens
Efficiency: N/A
Efficacy: 96.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 41.1
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	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°	10855	10855	10855
5°	10879	10776	10845
10°	10813	10700	10761
15°	10696	10571	10616
20°	10528	10391	10410
25°	10348	10177	10167
30°	10125	9947	9897
35°	9887	9698	9561
40°	9642	9428	9294
45°	9376	9182	9000
50°	9086	8884	8618
55°	8804	8550	8310
60°	8468	8210	7918
65°	8067	7803	7539
70°	7685	7331	7082
75°	7002	6769	6536
80°	6234	6131	5984
85°	5423	5521	5219

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9376 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.1	3.6
10°-20°	407.1	10.2
20°-30°	601.0	15.1
30°-40°	701.2	17.6
40°-50°	704.2	17.7
50°-60°	618.2	15.6
60°-70°	460.5	11.6
70°-80°	263.0	6.6
80°-90°	75.9	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°	1152.2	29.0
0°-40°	1853.4	46.6
0°-60°	3175.9	79.9
0°-90°	3975.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3975.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1527	1527	1527	1527	1527	
5°	1525	1522	1510	1521	1520	145
15°	1454	1450	1437	1443	1443	410
25°	1320	1314	1298	1300	1296	607
35°	1140	1135	1118	1112	1102	713
45°	933	928	914	899	895	719
55°	710	707	690	679	671	634
65°	480	477	464	453	448	476
75°	255	252	246	243	238	271
85°	66	68	68	66	64	77
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1527.3	1527.3	1527.3	1527.3	1527.3
2.5°	1532.2	1528.5	1516.5	1528.5	1527.3
5°	1524.9	1522.5	1510.4	1521.3	1520.1
7.5°	1514.0	1511.6	1498.3	1509.2	1508.0
10°	1498.3	1495.9	1482.6	1492.3	1491.1
12.5°	1479.0	1474.2	1462.1	1469.3	1469.3
15°	1453.6	1450.0	1436.7	1442.8	1442.8
17.5°	1427.0	1421.0	1407.7	1415.0	1408.9
20°	1392.0	1389.6	1373.9	1382.3	1376.3
22.5°	1357.0	1352.1	1337.6	1342.5	1338.8
25°	1319.5	1313.5	1297.8	1300.2	1296.5
27.5°	1276.0	1272.4	1256.7	1257.9	1254.3
30°	1233.7	1230.1	1212.0	1209.5	1205.9
32.5°	1187.8	1181.8	1166.0	1161.2	1154.0
35°	1139.5	1134.6	1117.7	1111.7	1102.0
37.5°	1089.9	1083.9	1068.2	1059.7	1053.7
40°	1039.2	1033.1	1016.2	1005.3	1001.7
42.5°	984.8	980.0	963.0	953.4	947.3
45°	932.8	928.0	913.5	899.0	895.4
47.5°	876.0	877.3	859.1	844.6	836.2
50°	821.7	818.0	803.5	787.8	779.4
52.5°	766.1	763.7	748.0	734.7	725.0
55°	710.5	706.9	690.0	679.1	670.6
57.5°	651.3	650.1	635.6	621.1	617.5
60°	595.7	590.9	577.6	565.5	557.0
62.5°	537.7	534.1	523.2	509.9	503.9
65°	479.7	477.3	464.0	453.1	448.3
67.5°	422.9	418.1	408.4	398.8	396.3
70°	369.8	363.7	352.8	345.6	340.8
72.5°	311.8	308.1	302.1	293.6	288.8
75°	255.0	252.5	246.5	242.9	238.0
77.5°	201.8	200.6	197.0	194.5	190.9
80°	152.3	152.3	149.8	148.6	146.2
82.5°	108.8	106.3	106.3	103.9	103.9
85°	66.5	67.7	67.7	66.5	64.0
87.5°	32.6	32.6	31.4	31.4	29.0
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	19.63	21.25	20.00	21.57	21.88	19.31	20.93	19.67	21.24	21.55
	3H	21.40	22.87	21.78	23.19	23.55	21.04	22.50	21.42	22.83	23.19
	4H	22.06	23.44	22.46	23.79	24.16	21.69	23.06	22.08	23.41	23.79
	6H	22.54	23.81	22.95	24.18	24.57	22.17	23.45	22.58	23.81	24.20
	8H	22.69	23.91	23.12	24.30	24.70	22.33	23.55	22.76	23.94	24.34
	12H	22.80	23.97	23.23	24.35	24.78	22.44	23.61	22.87	23.99	24.42
4H	2H	20.21	21.59	20.61	21.94	22.31	19.95	21.33	20.35	21.68	22.05
	3H	22.21	23.36	22.62	23.76	24.16	21.91	23.06	22.32	23.46	23.86
	4H	22.99	24.04	23.43	24.45	24.89	22.68	23.72	23.11	24.14	24.57
	6H	23.60	24.52	24.06	24.96	25.41	23.29	24.21	23.75	24.65	25.10
	8H	23.81	24.66	24.27	25.10	25.57	23.50	24.36	23.96	24.80	25.27
	12H	23.96	24.73	24.44	25.20	25.67	23.66	24.43	24.14	24.90	25.37
8H	4H	23.28	24.14	23.74	24.58	25.04	23.00	23.86	23.46	24.30	24.76
	6H	24.01	24.72	24.50	25.21	25.68	23.74	24.45	24.24	24.94	25.42
	8H	24.29	24.93	24.80	25.43	25.92	24.03	24.66	24.54	25.17	25.66
	12H	24.52	25.08	25.03	25.57	26.14	24.26	24.82	24.77	25.31	25.87
12H	4H	23.31	24.08	23.79	24.55	25.02	23.04	23.81	23.52	24.28	24.75
	6H	24.06	24.70	24.57	25.21	25.69	23.80	24.44	24.31	24.95	25.43
	8H	24.40	24.96	24.91	25.45	26.02	24.15	24.71	24.65	25.20	25.76