

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: P243659

Luminaire Tested: S125DRP-H1270D940-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P243659
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-H1270D940-X4F0-XX-UDD-F-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

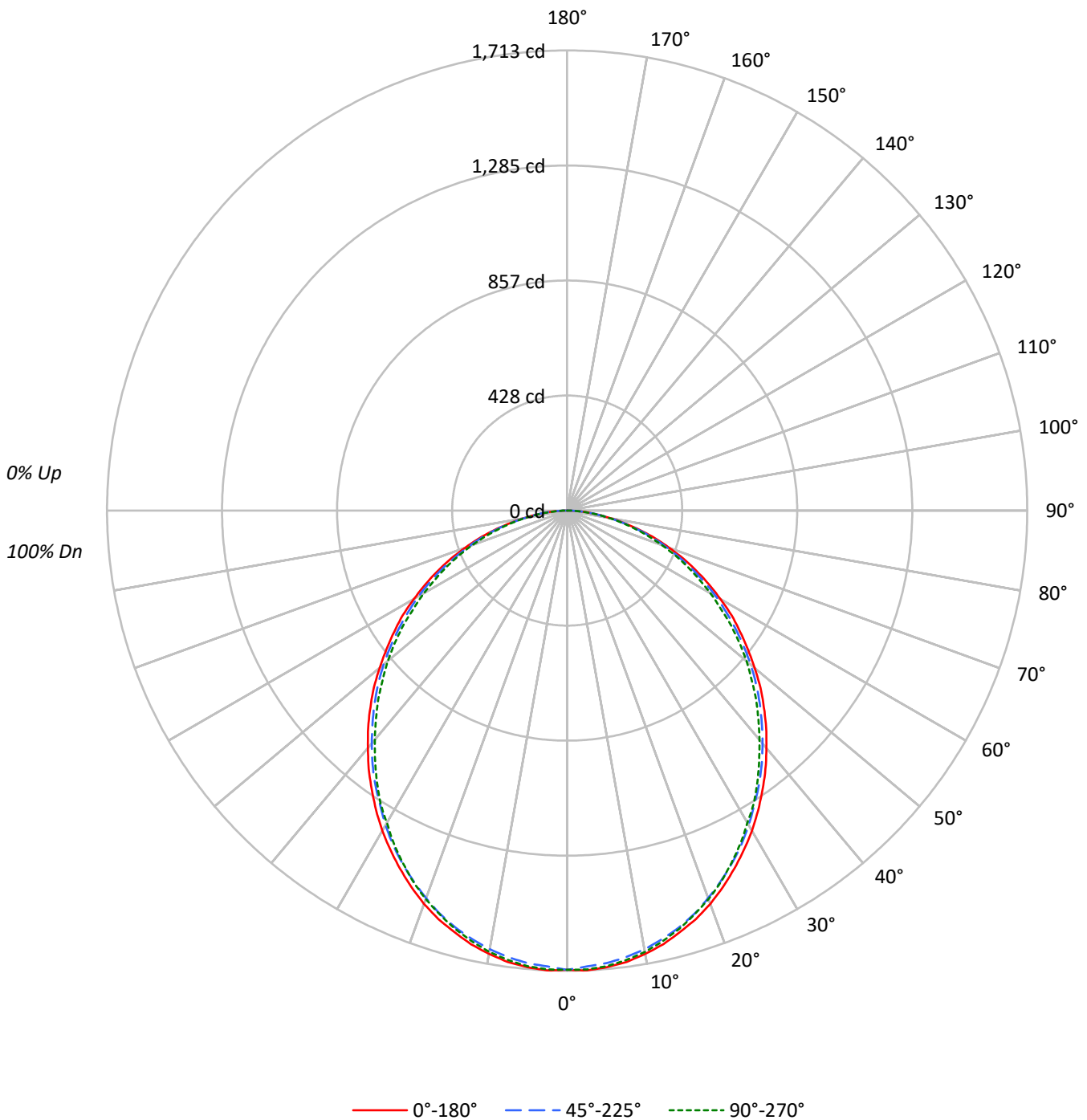
Lumens per Lamp: N/A
Luminaire Lumens: 4413.0 lumens
Efficiency: N/A
Efficacy: 117.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

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°	12151	12151	12151
5°	12170	12063	12144
10°	12094	11967	12039
15°	11952	11823	11860
20°	11782	11612	11640
25°	11538	11371	11351
30°	11293	11096	11014
35°	11003	10807	10708
40°	10707	10497	10334
45°	10413	10187	9998
50°	10069	9861	9638
55°	9730	9466	9217
60°	9360	9093	8772
65°	8923	8607	8311
70°	8366	8055	7793
75°	7716	7475	7129
80°	6725	6676	6520
85°	5831	5831	5521

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10413 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.3	3.7
10°-20°	455.1	10.3
20°-30°	670.9	15.2
30°-40°	781.4	17.7
40°-50°	783.0	17.7
50°-60°	684.5	15.5
60°-70°	508.0	11.5
70°-80°	288.1	6.5
80°-90°	80.8	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°	1287.4	29.2
0°-40°	2068.7	46.9
0°-60°	3536.1	80.1
0°-90°	4413.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4413.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1710	1710	1710	1710	1710	
5°	1706	1703	1691	1703	1702	162
15°	1624	1622	1607	1616	1612	458
25°	1471	1466	1450	1454	1448	678
35°	1268	1261	1246	1238	1234	793
45°	1036	1034	1014	998	995	799
55°	785	784	764	748	744	703
65°	531	527	512	500	494	526
75°	281	276	272	267	260	298
85°	72	72	72	69	68	83
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1709.6	1709.6	1709.6	1709.6	1709.6
2.5°	1713.4	1710.9	1698.3	1710.9	1709.6
5°	1705.8	1703.3	1690.8	1703.3	1702.1
7.5°	1694.6	1690.8	1677.0	1689.5	1687.0
10°	1675.7	1673.2	1658.2	1668.2	1668.2
12.5°	1653.2	1649.4	1634.3	1643.1	1641.9
15°	1624.3	1621.8	1606.8	1615.5	1611.8
17.5°	1594.2	1587.9	1574.1	1581.7	1576.7
20°	1557.8	1552.8	1535.3	1541.5	1539.0
22.5°	1516.4	1510.2	1493.9	1497.6	1496.4
25°	1471.3	1466.3	1450.0	1453.7	1447.5
27.5°	1424.9	1418.6	1403.6	1403.6	1397.3
30°	1376.0	1369.7	1352.1	1352.1	1342.1
32.5°	1323.3	1318.3	1296.9	1295.7	1293.2
35°	1268.1	1260.6	1245.5	1238.0	1234.2
37.5°	1212.9	1206.6	1190.3	1180.3	1174.0
40°	1154.0	1150.2	1131.4	1122.6	1113.8
42.5°	1096.3	1092.5	1072.4	1057.4	1053.6
45°	1036.0	1033.5	1013.5	998.4	994.7
47.5°	975.8	973.3	953.3	937.0	930.7
50°	910.6	910.6	891.8	875.5	871.7
52.5°	847.9	846.7	827.8	811.5	807.8
55°	785.2	783.9	763.9	747.6	743.8
57.5°	726.2	718.7	701.2	688.6	676.1
60°	658.5	654.7	639.7	623.4	617.1
62.5°	595.8	590.8	575.7	561.9	553.1
65°	530.6	526.8	511.8	500.5	494.2
67.5°	469.1	464.1	449.0	440.3	435.2
70°	402.6	398.9	387.6	376.3	375.0
72.5°	343.7	338.7	332.4	322.4	317.3
75°	281.0	275.9	272.2	267.2	259.6
77.5°	220.8	218.2	215.7	212.0	208.2
80°	164.3	164.3	163.1	160.6	159.3
82.5°	116.6	117.9	114.1	111.6	111.6
85°	71.5	71.5	71.5	69.0	67.7
87.5°	35.1	31.4	31.4	28.8	28.8
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	19.98	21.60	20.35	21.91	22.23	19.65	21.26	20.01	21.58	21.89
	3H	21.74	23.20	22.12	23.53	23.89	21.36	22.82	21.74	23.15	23.51
	4H	22.39	23.77	22.79	24.11	24.49	22.00	23.37	22.40	23.72	24.10
	6H	22.85	24.13	23.27	24.49	24.88	22.47	23.75	22.88	24.11	24.50
	8H	23.00	24.22	23.43	24.61	25.01	22.63	23.84	23.05	24.23	24.63
	12H	23.10	24.27	23.53	24.65	25.08	22.73	23.89	23.16	24.28	24.70
4H	2H	20.56	21.93	20.96	22.28	22.65	20.29	21.66	20.69	22.01	22.39
	3H	22.54	23.69	22.95	24.09	24.49	22.22	23.37	22.63	23.77	24.17
	4H	23.32	24.36	23.75	24.77	25.20	22.99	24.03	23.42	24.44	24.88
	6H	23.90	24.81	24.36	25.25	25.71	23.59	24.50	24.04	24.94	25.39
	8H	24.10	24.95	24.56	25.40	25.86	23.79	24.64	24.25	25.08	25.55
	12H	24.25	25.01	24.73	25.49	25.96	23.93	24.70	24.41	25.17	25.64
8H	4H	23.60	24.45	24.06	24.89	25.36	23.31	24.16	23.77	24.60	25.07
	6H	24.31	25.01	24.80	25.50	25.98	24.03	24.74	24.52	25.23	25.70
	8H	24.58	25.21	25.09	25.72	26.21	24.30	24.94	24.81	25.44	25.93
	12H	24.80	25.36	25.31	25.85	26.41	24.52	25.08	25.03	25.57	26.13
12H	4H	23.63	24.39	24.11	24.86	25.33	23.34	24.11	23.82	24.58	25.05
	6H	24.35	24.99	24.86	25.50	25.98	24.09	24.72	24.60	25.23	25.72
	8H	24.68	25.25	25.19	25.74	26.30	24.42	24.98	24.92	25.47	26.03