

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: P242799

Luminaire Tested: S125DRP-S1270D940-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P242799
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-S1270D940-X4F0-XX-UDD-F-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

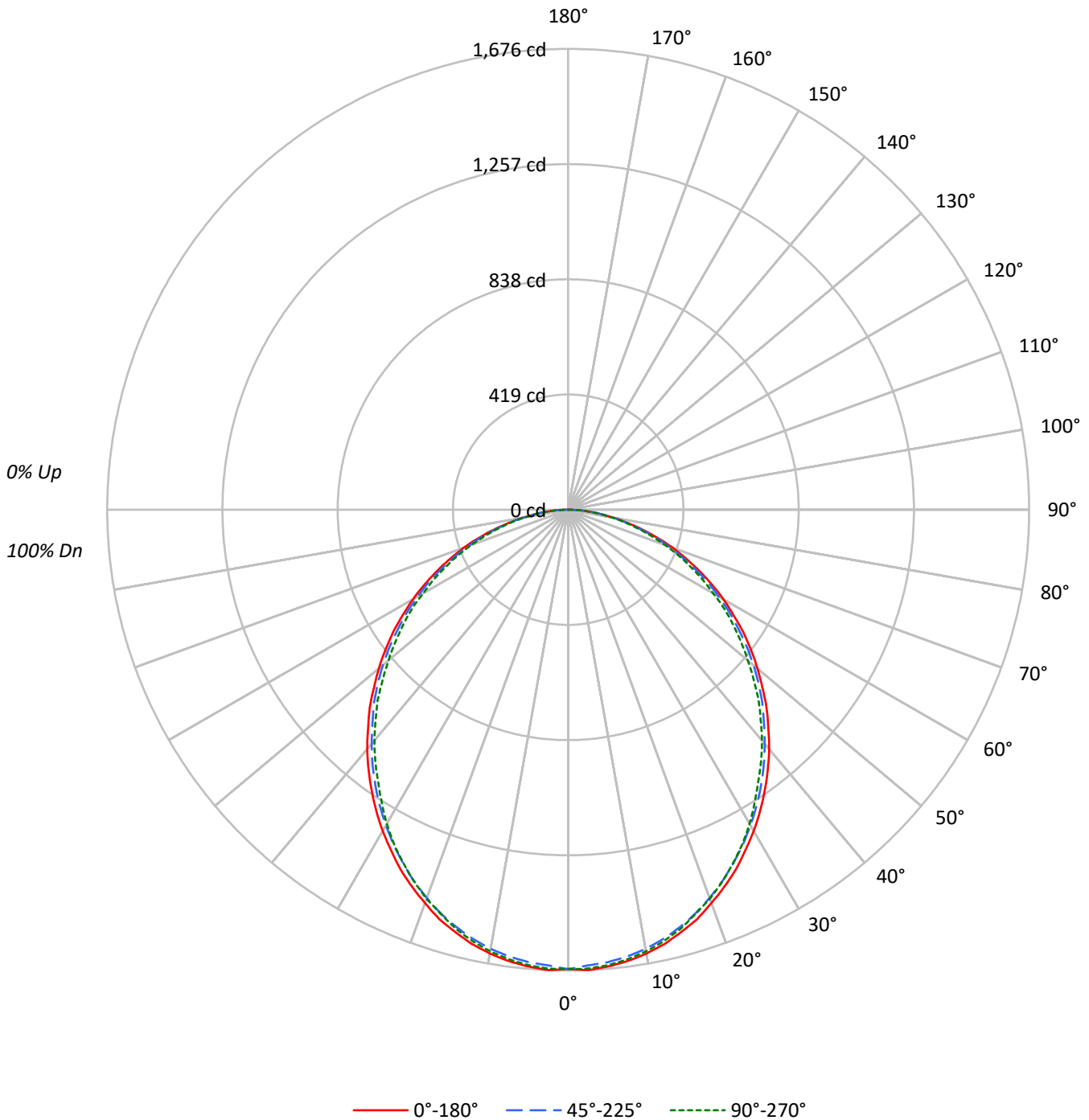
Lumens per Lamp: N/A
Luminaire Lumens: 4347.9 lumens
Efficiency: N/A
Efficacy: 105.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

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	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					100			
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84					84			
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	70					70			
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	59					59			
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51					51			
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44					44			
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	39					39			
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34					34			
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31					31			
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28					28			
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25					25			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11873	11873	11873
5°	11899	11786	11862
10°	11827	11703	11769
15°	11699	11562	11611
20°	11515	11365	11385
25°	11318	11131	11121
30°	11074	10878	10824
35°	10813	10607	10458
40°	10545	10312	10165
45°	10255	10042	9843
50°	9937	9718	9425
55°	9629	9350	9089
60°	9261	8979	8661
65°	8824	8535	8246
70°	8404	8019	7745
75°	7659	7403	7151
80°	6815	6708	6545
85°	5929	6035	5708

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10255 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.6	3.6
10°-20°	445.2	10.2
20°-30°	657.3	15.1
30°-40°	766.9	17.6
40°-50°	770.3	17.7
50°-60°	676.2	15.6
60°-70°	503.6	11.6
70°-80°	287.6	6.6
80°-90°	83.0	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°	1260.2	29.0
0°-40°	2027.2	46.6
0°-60°	3473.6	79.9
0°-90°	4347.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4347.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1670	1670	1670	1670	1670	
5°	1668	1665	1652	1664	1663	158
15°	1590	1586	1571	1578	1578	448
25°	1443	1437	1419	1422	1418	664
35°	1246	1241	1222	1216	1205	780
45°	1020	1015	999	983	979	786
55°	777	773	755	743	734	694
65°	525	522	508	496	490	520
75°	279	276	270	266	260	297
85°	73	74	74	73	70	84
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1670.5	1670.5	1670.5	1670.5	1670.5
2.5°	1675.8	1671.8	1658.6	1671.8	1670.5
5°	1667.8	1665.2	1652.0	1663.9	1662.6
7.5°	1655.9	1653.3	1638.8	1650.7	1649.3
10°	1638.8	1636.1	1621.6	1632.2	1630.8
12.5°	1617.6	1612.3	1599.1	1607.0	1607.0
15°	1589.9	1585.9	1571.4	1578.0	1578.0
17.5°	1560.8	1554.2	1539.6	1547.6	1541.0
20°	1522.5	1519.8	1502.6	1511.9	1505.3
22.5°	1484.1	1478.9	1463.0	1468.3	1464.3
25°	1443.2	1436.6	1419.4	1422.0	1418.1
27.5°	1395.6	1391.6	1374.4	1375.8	1371.8
30°	1349.3	1345.4	1325.5	1322.9	1318.9
32.5°	1299.1	1292.5	1275.3	1270.0	1262.1
35°	1246.3	1241.0	1222.5	1215.9	1205.3
37.5°	1192.1	1185.5	1168.3	1159.0	1152.4
40°	1136.6	1130.0	1111.5	1099.6	1095.6
42.5°	1077.1	1071.8	1053.3	1042.7	1036.1
45°	1020.3	1015.0	999.1	983.3	979.3
47.5°	958.1	959.5	939.6	923.8	914.5
50°	898.7	894.7	878.9	861.7	852.4
52.5°	837.9	835.2	818.1	803.5	793.0
55°	777.1	773.1	754.6	742.7	733.5
57.5°	712.3	711.0	695.2	679.3	675.3
60°	651.5	646.3	631.7	618.5	609.3
62.5°	588.1	584.1	572.2	557.7	551.1
65°	524.7	522.0	507.5	495.6	490.3
67.5°	462.6	457.3	446.7	436.1	433.5
70°	404.4	397.8	385.9	378.0	372.7
72.5°	341.0	337.0	330.4	321.1	315.9
75°	278.9	276.2	269.6	265.6	260.4
77.5°	220.7	219.4	215.4	212.8	208.8
80°	166.5	166.5	163.9	162.6	159.9
82.5°	118.9	116.3	116.3	113.7	113.7
85°	72.7	74.0	74.0	72.7	70.0
87.5°	35.7	35.7	34.4	34.4	31.7
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	19.95	21.56	20.31	21.88	22.19	19.62	21.24	19.98	21.55	21.87
	3H	21.72	23.18	22.09	23.50	23.86	21.35	22.81	21.73	23.14	23.50
	4H	22.37	23.75	22.77	24.10	24.47	22.00	23.37	22.39	23.72	24.10
	6H	22.85	24.13	23.26	24.49	24.88	22.48	23.76	22.89	24.12	24.51
	8H	23.01	24.22	23.43	24.61	25.01	22.64	23.86	23.07	24.25	24.65
	12H	23.11	24.28	23.54	24.66	25.09	22.75	23.92	23.18	24.30	24.73
4H	2H	20.52	21.90	20.92	22.25	22.62	20.26	21.64	20.66	21.99	22.37
	3H	22.52	23.67	22.93	24.07	24.47	22.22	23.37	22.63	23.77	24.17
	4H	23.31	24.35	23.74	24.76	25.20	22.99	24.03	23.42	24.45	24.88
	6H	23.91	24.83	24.37	25.27	25.72	23.61	24.52	24.06	24.96	25.42
	8H	24.12	24.97	24.58	25.42	25.88	23.82	24.67	24.28	25.11	25.58
	12H	24.27	25.04	24.75	25.51	25.98	23.97	24.74	24.45	25.21	25.68
8H	4H	23.59	24.45	24.05	24.89	25.35	23.31	24.17	23.77	24.61	25.08
	6H	24.32	25.03	24.82	25.52	26.00	24.05	24.76	24.55	25.25	25.73
	8H	24.60	25.24	25.11	25.74	26.23	24.34	24.97	24.85	25.48	25.97
	12H	24.83	25.39	25.34	25.89	26.45	24.57	25.14	25.08	25.63	26.19
12H	4H	23.62	24.39	24.10	24.87	25.33	23.35	24.12	23.83	24.59	25.06
	6H	24.37	25.01	24.88	25.52	26.00	24.12	24.75	24.62	25.26	25.75
	8H	24.71	25.28	25.22	25.77	26.33	24.46	25.02	24.97	25.51	26.07