

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: P243738

Luminaire Tested: S125RDRP-H1270D830-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P243738
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-66)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-H1270D830-X4F0-XX-UDD-F-W
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

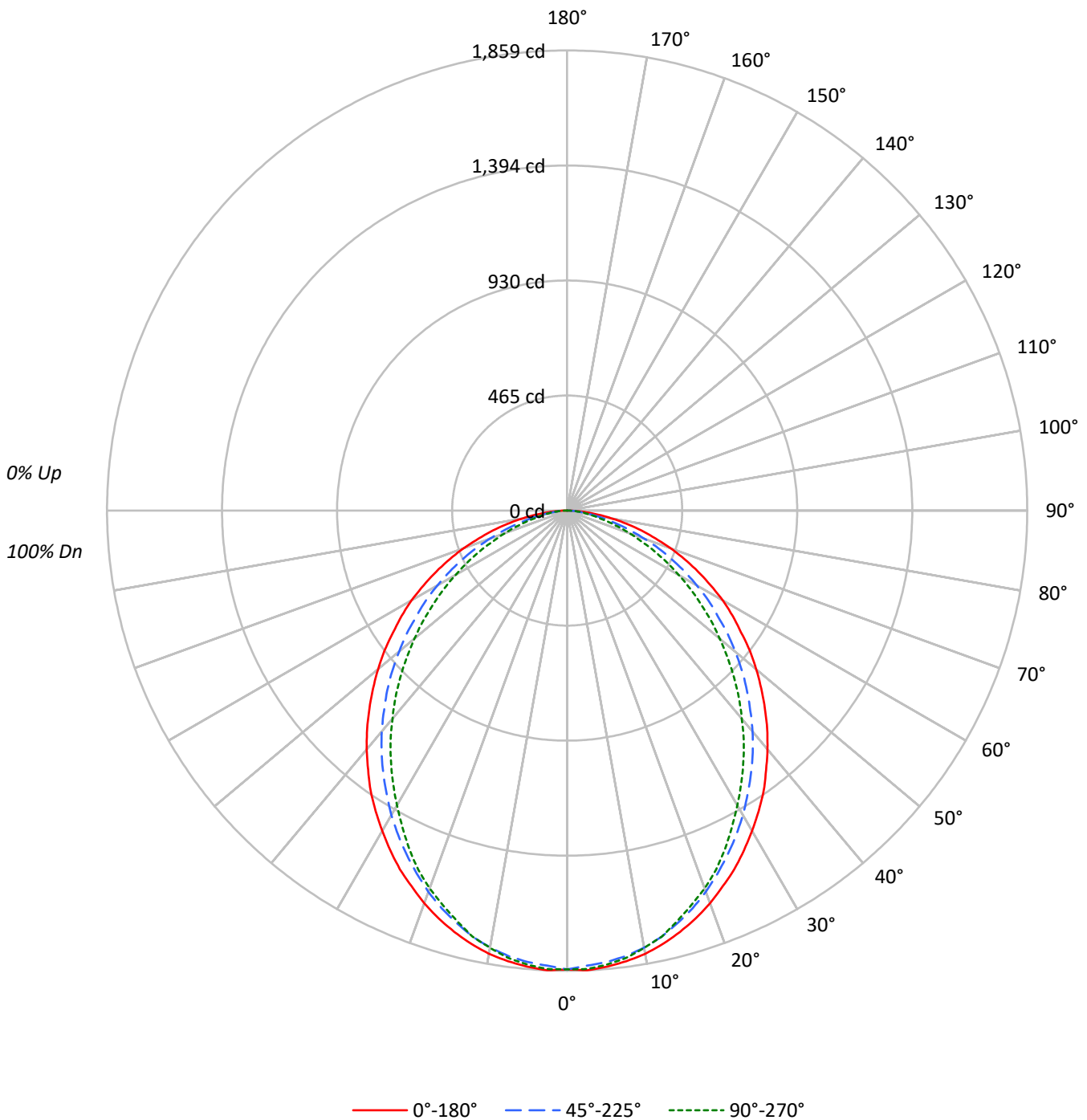
Lumens per Lamp: N/A
Luminaire Lumens: 4430.2 lumens
Efficiency: N/A
Efficacy: 117.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.12 / 1.26
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P243738

CATALOG NUMBER: S125RDRP-H1270D830-X4F0-XX-UDD-F-W

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	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	78	84	79	76	81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	61
4	84	73	64	58	82	71	63	57	69	62	57	67	61	56	64	59	55	53
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	43	55	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	49	43	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	35	45	39	34	32
9	58	45	37	32	57	45	37	32	43	36	31	42	36	31	41	35	31	29
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13173	13173	13173
5°	13195	13063	13138
10°	13118	12936	12946
15°	12965	12692	12633
20°	12765	12394	12284
25°	12539	12029	11832
30°	12263	11653	11284
35°	12009	11239	10767
40°	11686	10813	10185
45°	11354	10328	9581
50°	11024	9792	8899
55°	10629	9199	8181
60°	10308	8594	7406
65°	9811	7871	6555
70°	9258	6887	5592
75°	8518	5753	4550
80°	7490	4449	3745
85°	6377	3678	3458

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11354 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	174.6	3.9
10°-20°	489.0	11.0
20°-30°	711.6	16.1
30°-40°	814.9	18.4
40°-50°	797.4	18.0
50°-60°	673.2	15.2
60°-70°	471.3	10.6
70°-80°	239.4	5.4
80°-90°	58.9	1.3
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°	1375.1	31.0
0°-40°	2190.0	49.4
0°-60°	3660.6	82.6
0°-90°	4430.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4430.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1854	1854	1854	1854	1854	
5°	1850	1846	1831	1843	1842	176
15°	1762	1755	1725	1724	1717	497
25°	1599	1580	1534	1518	1509	736
35°	1384	1351	1295	1257	1241	864
45°	1130	1092	1028	973	953	872
55°	858	821	742	683	660	770
65°	583	538	468	410	390	578
75°	310	272	210	175	166	328
85°	78	50	45	42	42	89
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1853.5	1853.5	1853.5	1853.5	1853.5
2.5°	1858.8	1854.8	1840.2	1853.5	1853.5
5°	1849.5	1845.5	1830.9	1842.9	1841.5
7.5°	1836.2	1832.3	1815.0	1826.9	1823.0
10°	1817.7	1812.4	1792.5	1799.1	1793.8
12.5°	1792.5	1787.2	1763.3	1766.0	1763.3
15°	1762.0	1755.4	1724.9	1723.5	1716.9
17.5°	1727.5	1718.2	1685.1	1681.1	1670.5
20°	1687.7	1675.8	1638.7	1630.7	1624.1
22.5°	1642.7	1630.7	1587.0	1575.0	1571.1
25°	1598.9	1580.3	1533.9	1518.0	1508.8
27.5°	1547.2	1526.0	1478.3	1457.0	1441.1
30°	1494.2	1470.3	1419.9	1392.1	1374.9
32.5°	1439.8	1412.0	1357.6	1323.1	1308.6
35°	1384.1	1351.0	1295.3	1256.9	1240.9
37.5°	1320.5	1287.3	1231.7	1186.6	1172.0
40°	1259.5	1225.0	1165.4	1116.3	1097.8
42.5°	1195.9	1160.1	1095.1	1043.4	1027.5
45°	1129.6	1092.5	1027.5	973.1	953.2
47.5°	1063.3	1026.2	958.6	904.2	879.0
50°	997.0	957.2	885.6	829.9	804.8
52.5°	930.7	887.0	816.7	757.0	734.5
55°	857.8	820.7	742.4	682.8	660.2
57.5°	792.8	751.7	677.5	616.5	591.3
60°	725.2	680.1	604.6	544.9	521.0
62.5°	653.6	608.5	535.6	476.0	454.7
65°	583.4	538.3	468.0	409.7	389.8
67.5°	513.1	470.7	400.4	346.0	323.5
70°	445.5	401.7	331.4	282.4	269.1
72.5°	373.9	339.4	269.1	225.4	214.8
75°	310.2	271.8	209.5	175.0	165.7
77.5°	245.3	208.1	155.1	131.3	123.3
80°	183.0	151.1	108.7	94.1	91.5
82.5°	126.0	95.5	71.6	68.9	67.6
85°	78.2	50.4	45.1	42.4	42.4
87.5°	33.1	21.2	21.2	19.9	21.2
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	20.38	21.96	20.75	22.28	22.59	18.87	20.45	19.24	20.77	21.08
	3H	22.14	23.57	22.52	23.89	24.25	20.15	21.57	20.53	21.90	22.26
	4H	22.80	24.14	23.20	24.48	24.86	20.54	21.87	20.94	22.22	22.60
	6H	23.27	24.51	23.68	24.87	25.26	20.78	22.01	21.19	22.38	22.77
	8H	23.42	24.59	23.84	24.98	25.38	20.85	22.03	21.28	22.42	22.82
	12H	23.51	24.64	23.94	25.02	25.45	20.91	22.03	21.34	22.41	22.84
4H	2H	20.78	22.12	21.18	22.47	22.84	19.56	20.89	19.96	21.24	21.62
	3H	22.75	23.86	23.16	24.26	24.66	21.02	22.13	21.43	22.53	22.93
	4H	23.53	24.53	23.96	24.94	25.38	21.49	22.49	21.92	22.91	23.34
	6H	24.12	24.99	24.57	25.43	25.89	21.81	22.68	22.26	23.12	23.58
	8H	24.31	25.12	24.77	25.57	26.03	21.91	22.73	22.37	23.17	23.64
	12H	24.44	25.17	24.92	25.65	26.12	22.00	22.73	22.48	23.20	23.67
8H	4H	23.65	24.46	24.11	24.91	25.37	21.80	22.61	22.26	23.06	23.52
	6H	24.32	25.00	24.82	25.49	25.96	22.19	22.87	22.69	23.36	23.83
	8H	24.56	25.16	25.07	25.67	26.16	22.34	22.95	22.86	23.46	23.95
	12H	24.75	25.28	25.26	25.78	26.34	22.48	23.02	22.99	23.51	24.07
12H	4H	23.64	24.37	24.12	24.85	25.32	21.83	22.56	22.31	23.04	23.51
	6H	24.31	24.92	24.82	25.43	25.92	22.24	22.85	22.75	23.36	23.84
	8H	24.59	25.13	25.10	25.62	26.18	22.44	22.98	22.95	23.47	24.03