

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: P243734

Luminaire Tested: S125RDRP-H375D830-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P243734
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-H375D830-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

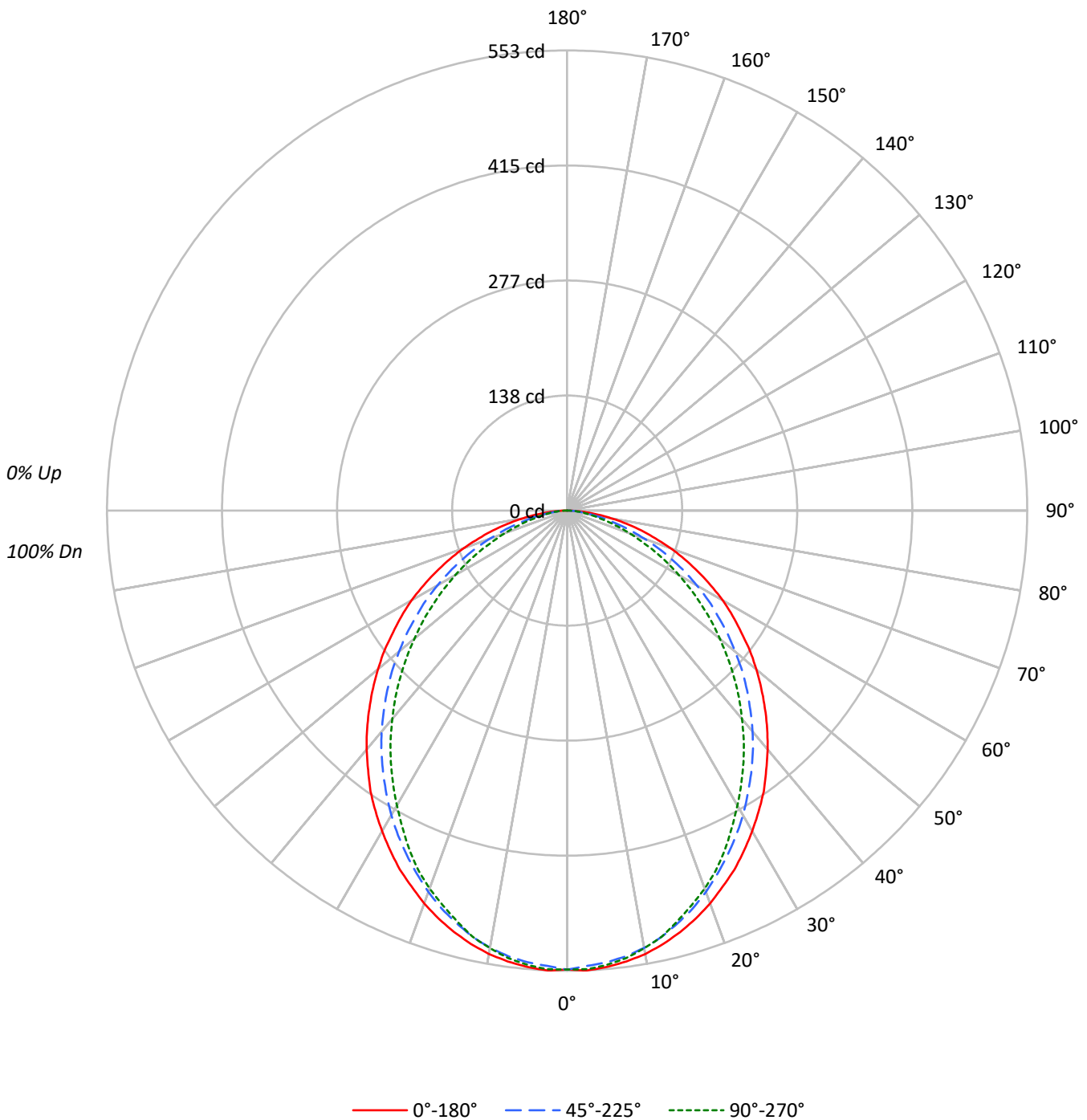
Lumens per Lamp: N/A
Luminaire Lumens: 1318.5 lumens
Efficiency: N/A
Efficacy: 117.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.12 / 1.26
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 11.2
Input Voltage (V): 120
Input Current (A_{in}): 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	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85					85			
2	100	92	86	80	97	90	84	79	87	82	78	84	79	76	81	77	74	72					72			
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	61					61			
4	84	73	64	58	82	71	63	57	69	62	57	67	61	56	64	59	55	53					53			
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46					46			
6	72	59	50	44	70	58	50	44	56	49	43	55	48	43	53	47	43	41					41			
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	49	43	38	36					36			
8	62	49	41	35	61	48	40	35	47	40	35	46	39	35	45	39	34	32					32			
9	58	45	37	32	57	45	37	32	43	36	31	42	36	31	41	35	31	29					29			
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28	27					27			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3920	3920	3920
5°	3927	3888	3910
10°	3904	3850	3853
15°	3859	3777	3760
20°	3799	3689	3656
25°	3732	3580	3521
30°	3650	3468	3358
35°	3574	3345	3204
40°	3477	3218	3031
45°	3379	3074	2852
50°	3281	2915	2648
55°	3163	2738	2435
60°	3068	2557	2205
65°	2920	2343	1951
70°	2755	2049	1665
75°	2535	1711	1354
80°	2231	1326	1113
85°	1900	1093	1028

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3379 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.0	3.9
10°-20°	145.5	11.0
20°-30°	211.8	16.1
30°-40°	242.5	18.4
40°-50°	237.3	18.0
50°-60°	200.4	15.2
60°-70°	140.3	10.6
70°-80°	71.2	5.4
80°-90°	17.5	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°	409.3	31.0
0°-40°	651.8	49.4
0°-60°	1089.5	82.6
0°-90°	1318.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1318.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	552	552	552	552	552	
5°	550	549	545	548	548	52
15°	524	522	513	513	511	148
25°	476	470	456	452	449	219
35°	412	402	386	374	369	257
45°	336	325	306	290	284	259
55°	255	244	221	203	196	229
65°	174	160	139	122	116	172
75°	92	81	62	52	49	98
85°	23	15	13	13	13	27
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	551.6	551.6	551.6	551.6	551.6
2.5°	553.2	552.0	547.7	551.6	551.6
5°	550.4	549.3	544.9	548.5	548.1
7.5°	546.5	545.3	540.2	543.7	542.5
10°	541.0	539.4	533.5	535.4	533.9
12.5°	533.5	531.9	524.8	525.6	524.8
15°	524.4	522.4	513.3	513.0	511.0
17.5°	514.1	511.4	501.5	500.3	497.2
20°	502.3	498.7	487.7	485.3	483.4
22.5°	488.9	485.3	472.3	468.8	467.6
25°	475.9	470.3	456.5	451.8	449.0
27.5°	460.5	454.2	440.0	433.6	428.9
30°	444.7	437.6	422.6	414.3	409.2
32.5°	428.5	420.2	404.0	393.8	389.4
35°	411.9	402.1	385.5	374.1	369.3
37.5°	393.0	383.1	366.6	353.1	348.8
40°	374.8	364.6	346.8	332.2	326.7
42.5°	355.9	345.3	325.9	310.5	305.8
45°	336.2	325.1	305.8	289.6	283.7
47.5°	316.5	305.4	285.3	269.1	261.6
50°	296.7	284.9	263.6	247.0	239.5
52.5°	277.0	264.0	243.1	225.3	218.6
55°	255.3	244.2	221.0	203.2	196.5
57.5°	236.0	223.7	201.6	183.5	176.0
60°	215.8	202.4	179.9	162.2	155.1
62.5°	194.5	181.1	159.4	141.7	135.3
65°	173.6	160.2	139.3	121.9	116.0
67.5°	152.7	140.1	119.2	103.0	96.3
70°	132.6	119.6	98.6	84.0	80.1
72.5°	111.3	101.0	80.1	67.1	63.9
75°	92.3	80.9	62.3	52.1	49.3
77.5°	73.0	61.9	46.2	39.1	36.7
80°	54.5	45.0	32.4	28.0	27.2
82.5°	37.5	28.4	21.3	20.5	20.1
85°	23.3	15.0	13.4	12.6	12.6
87.5°	9.9	6.3	6.3	5.9	6.3
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	16.17	17.75	16.54	18.06	18.38	14.66	16.24	15.03	16.56	16.87
	3H	17.93	19.35	18.31	19.68	20.04	15.94	17.36	16.32	17.69	18.05
	4H	18.59	19.93	18.99	20.27	20.65	16.33	17.66	16.73	18.01	18.39
	6H	19.06	20.30	19.47	20.66	21.05	16.56	17.80	16.98	18.17	18.56
	8H	19.21	20.38	19.63	20.77	21.17	16.64	17.82	17.07	18.21	18.61
	12H	19.30	20.43	19.73	20.81	21.24	16.69	17.82	17.12	18.20	18.63
4H	2H	16.57	17.91	16.97	18.26	18.63	15.35	16.68	15.75	17.03	17.41
	3H	18.54	19.65	18.95	20.05	20.45	16.81	17.92	17.22	18.32	18.72
	4H	19.32	20.32	19.75	20.73	21.17	17.28	18.28	17.71	18.69	19.13
	6H	19.91	20.78	20.36	21.22	21.68	17.60	18.47	18.05	18.91	19.37
	8H	20.09	20.91	20.56	21.35	21.82	17.70	18.52	18.16	18.96	19.43
	12H	20.23	20.96	20.71	21.44	21.91	17.79	18.52	18.27	18.99	19.46
8H	4H	19.44	20.25	19.90	20.70	21.16	17.59	18.40	18.05	18.85	19.31
	6H	20.11	20.79	20.61	21.28	21.75	17.98	18.66	18.48	19.15	19.62
	8H	20.35	20.95	20.86	21.46	21.95	18.13	18.74	18.65	19.25	19.74
	12H	20.54	21.07	21.05	21.56	22.13	18.27	18.81	18.78	19.30	19.86
12H	4H	19.43	20.16	19.91	20.64	21.11	17.62	18.35	18.10	18.83	19.30
	6H	20.10	20.71	20.61	21.22	21.70	18.03	18.64	18.54	19.15	19.63
	8H	20.38	20.92	20.89	21.41	21.97	18.23	18.77	18.74	19.26	19.82