

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: P243743

Luminaire Tested: S125RDRP-H375D840-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P243743
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-H375D840-X4F0-XX-UDD-F-W
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

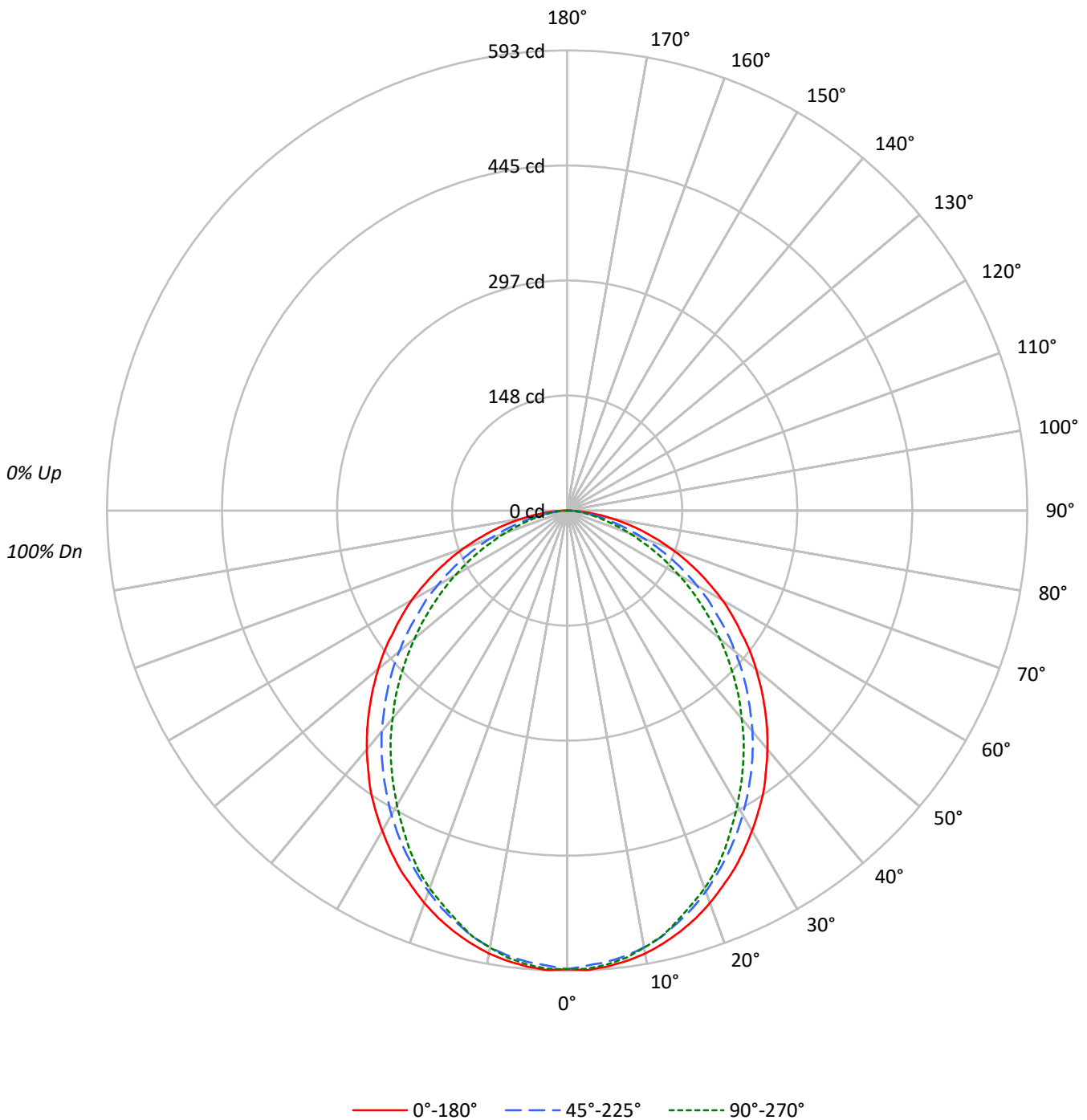
Lumens per Lamp: N/A
Luminaire Lumens: 1412.7 lumens
Efficiency: N/A
Efficacy: 126.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.12 / 1.26
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

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°	4200	4200	4200
5°	4208	4165	4189
10°	4183	4125	4128
15°	4134	4047	4029
20°	4071	3952	3917
25°	3998	3836	3773
30°	3911	3716	3598
35°	3830	3583	3433
40°	3726	3448	3247
45°	3620	3293	3056
50°	3515	3123	2837
55°	3389	2933	2608
60°	3288	2741	2361
65°	3128	2509	2090
70°	2951	2196	1783
75°	2716	1834	1450
80°	2386	1420	1195
85°	2031	1174	1101

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3620 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.7	3.9
10°-20°	155.9	11.0
20°-30°	226.9	16.1
30°-40°	259.8	18.4
40°-50°	254.3	18.0
50°-60°	214.7	15.2
60°-70°	150.3	10.6
70°-80°	76.3	5.4
80°-90°	18.8	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°	438.5	31.0
0°-40°	698.3	49.4
0°-60°	1167.3	82.6
0°-90°	1412.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1412.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	591	591	591	591	591	
5°	590	588	584	588	587	56
15°	562	560	550	550	548	158
25°	510	504	489	484	481	235
35°	441	431	413	401	396	276
45°	360	348	328	310	304	278
55°	274	262	237	218	210	245
65°	186	172	149	131	124	184
75°	99	87	67	56	53	105
85°	25	16	14	14	14	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	591.0	591.0	591.0	591.0	591.0
2.5°	592.7	591.4	586.8	591.0	591.0
5°	589.8	588.5	583.8	587.6	587.2
7.5°	585.5	584.3	578.8	582.6	581.3
10°	579.6	577.9	571.6	573.7	572.0
12.5°	571.6	569.9	562.3	563.1	562.3
15°	561.8	559.7	550.0	549.6	547.5
17.5°	550.9	547.9	537.3	536.1	532.7
20°	538.2	534.4	522.5	520.0	517.9
22.5°	523.8	520.0	506.0	502.2	501.0
25°	509.8	503.9	489.1	484.1	481.1
27.5°	493.4	486.6	471.4	464.6	459.5
30°	476.5	468.8	452.8	443.9	438.4
32.5°	459.1	450.2	432.9	421.9	417.3
35°	441.4	430.8	413.0	400.8	395.7
37.5°	421.1	410.5	392.7	378.4	373.7
40°	401.6	390.6	371.6	356.0	350.0
42.5°	381.3	369.9	349.2	332.7	327.6
45°	360.2	348.4	327.6	310.3	304.0
47.5°	339.1	327.2	305.7	288.3	280.3
50°	317.9	305.2	282.4	264.6	256.6
52.5°	296.8	282.8	260.4	241.4	234.2
55°	273.5	261.7	236.7	217.7	210.5
57.5°	252.8	239.7	216.0	196.6	188.6
60°	231.3	216.9	192.8	173.8	166.1
62.5°	208.4	194.0	170.8	151.8	145.0
65°	186.0	171.6	149.2	130.6	124.3
67.5°	163.6	150.1	127.7	110.3	103.2
70°	142.0	128.1	105.7	90.0	85.8
72.5°	119.2	108.2	85.8	71.9	68.5
75°	98.9	86.7	66.8	55.8	52.8
77.5°	78.2	66.4	49.5	41.9	39.3
80°	58.3	48.2	34.7	30.0	29.2
82.5°	40.2	30.4	22.8	22.0	21.6
85°	24.9	16.1	14.4	13.5	13.5
87.5°	10.6	6.8	6.8	6.3	6.8
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	16.41	17.99	16.78	18.30	18.62	14.90	16.48	15.27	16.80	17.11
	3H	18.17	19.59	18.55	19.92	20.28	16.18	17.60	16.56	17.93	18.29
	4H	18.83	20.16	19.23	20.51	20.89	16.57	17.90	16.97	18.25	18.63
	6H	19.30	20.54	19.71	20.90	21.29	16.80	18.04	17.22	18.40	18.80
	8H	19.45	20.62	19.87	21.01	21.41	16.88	18.06	17.31	18.45	18.85
	12H	19.54	20.67	19.97	21.05	21.48	16.93	18.06	17.36	18.44	18.87
4H	2H	16.81	18.15	17.21	18.49	18.87	15.59	16.92	15.99	17.27	17.65
	3H	18.77	19.89	19.18	20.29	20.69	17.05	18.16	17.46	18.56	18.96
	4H	19.56	20.56	19.99	20.97	21.41	17.52	18.52	17.95	18.93	19.37
	6H	20.15	21.02	20.60	21.46	21.92	17.84	18.71	18.29	19.15	19.61
	8H	20.33	21.15	20.80	21.59	22.06	17.94	18.76	18.40	19.20	19.67
	12H	20.47	21.20	20.95	21.68	22.15	18.03	18.76	18.51	19.23	19.70
8H	4H	19.68	20.49	20.14	20.93	21.40	17.83	18.64	18.29	19.09	19.55
	6H	20.35	21.03	20.84	21.52	21.99	18.22	18.90	18.72	19.39	19.86
	8H	20.59	21.19	21.10	21.70	22.19	18.37	18.98	18.89	19.49	19.98
	12H	20.78	21.31	21.28	21.80	22.37	18.51	19.05	19.02	19.54	20.10
12H	4H	19.67	20.40	20.15	20.88	21.35	17.86	18.59	18.34	19.07	19.54
	6H	20.34	20.95	20.85	21.46	21.94	18.27	18.88	18.78	19.38	19.87
	8H	20.62	21.15	21.13	21.65	22.21	18.47	19.01	18.98	19.50	20.06