



UL Verification Services Inc.  
7036 Snowdrift Road  
Allentown, PA 18106  
610-774-1300

## Photometric Indoor Test Report

Relevant Standards  
IES LM-79-2008  
ANSI C82.77-2002

Prepared For  
RENOVA Lighting Systems, Inc.  
Rick Edwards  
20 Middlesex Rd.  
Mansfield, Ma 02048-1828  
United States

Catalog Number  
L-WDG2-MN-L34-UNV-37DM-W36-C40-CA  
Project Number  
10405943  
Test Number  
691887

Test Date

2014-07-11

Prepared By

Handwritten signature of Javier Caban in black ink.

Javier Caban, Technician

Approved By

Handwritten signature of Jeff A. Smith Jr. in black ink.

Jeff Smith Jr., Project Handler

The results contained in this report pertain only to the tested sample.  
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Luminaire Description: Steel housing / heatsink, internal specular reflector, clear patterned acrylic lens enclosure  
Catalog Number: L-WDG2-MN-L34-UNV-37DM-W36-C40-CA  
Lamp: 100 white LEDs, two boards with 50 LEDs each  
Mounting: Surface  
Ballast/Driver: One LG Innotek LLP 37W 1.04Adc 26-34 max.Vdc

Luminaire

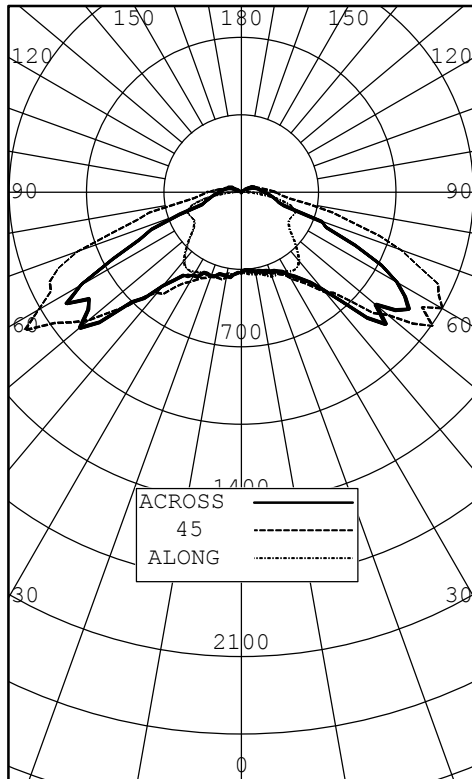


Test Conditions

Test Temperature:	25.1 °C
Voltage:	120.0 VAC
Current:	0.3033 A
Power:	36.20 W
Power Factor:	0.994
Frequency:	60 Hz
Current THD:	5.89 %



INTENSITY (CANDLEPOWER) SUMMARY OUTPUT  
 BEAM SIDE LUMENS



ANGLE	ALONG	67.5	45	22.5	ACROSS	LUMENS
0	364	364	364	364	364	
5	372	366	361	358	356	18
15	388	385	387	378	372	54
25	404	409	411	420	397	95
35	427	426	504	562	484	154
45	350	432	696	886	807	252
55	263	573	1055	1136	925	361
65	257	769	981	891	570	365
75	234	639	513	258	175	226
85	85	293	190	164	126	103
90	38	138	154	138	108	
95	28	78	122	114	92	52
105	15	30	70	82	72	30
115	8	13	30	52	53	15
125	2	6	6	17	21	5
135	0	2	0	0	3	1
145	0	0	0	0	0	0
155	0	0	0	0	0	0
165	0	0	0	0	0	0
175	0	0	0	0	0	0
180	0	0	0	0	0	

BOTH SIDES  
 ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LUMINAIRE
0-30	342	9.83
0-40	652	18.75
0-60	1892	54.42
0-90	3275	94.21
40-90	2623	75.45
60-90	1383	39.79
90-180	201	5.79
0-180	3476	100.00

EFFICACY (LUMENS PER WATT): 96.0

\*\*\* THIS IS AN ABSOLUTE TEST \*\*\*

LUMINOUS LENGTH: 24.500 INS  
 WIDTH: 5.250 INS

LUMINANCE SUMMARY - CD./SQ.M.

ANGLE	ALONG	45	ACROSS
45	5964	8282	8523
55	5525	13690	10358
65	7328	14483	7003
75	10895	9077	2475
85	11753	4398	2170

TESTED IN ACCORDANCE WITH IES PROCEDURES.



BEAM SIDE  
INTENSITY (CANDLEPOWER) DATA

ANGLE	PLANE						OUTPUT LUMENS
	ALONG	67.5	45	22.5	ACROSS	AVERAGE	
0	364	364	364	364	364	364	
5	372	366	361	358	356	362	18
10	377	372	371	367	367	371	
15	388	385	387	378	372	382	54
20	408	399	394	391	384	395	
25	404	409	411	420	397	410	95
30	416	418	453	467	434	441	
35	427	426	504	562	484	487	154
40	406	423	592	674	578	545	
45	350	432	696	886	807	648	252
50	298	463	865	1040	791	728	
55	263	573	1055	1136	925	840	361
60	251	710	1051	1052	814	836	
65	257	769	981	891	570	764	365
70	261	749	774	564	389	603	
75	234	639	513	258	175	404	226
80	163	468	318	205	150	287	
85	85	293	190	164	126	188	103
90	38	138	154	138	108	126	
95	28	78	122	114	92	94	52
100	21	49	95	99	81	73	
105	15	30	70	82	72	56	30
110	12	19	47	66	63	42	
115	8	13	30	52	53	31	15
120	3	9	15	32	37	19	
125	2	6	6	17	21	10	5
130	1	3	2	6	9	4	
135	0	2	0	0	3	1	1
140	0	1	0	0	0	0	
145	0	0	0	0	0	0	0
150	0	0	0	0	0	0	
155	0	0	0	0	0	0	0
160	0	0	0	0	0	0	
165	0	0	0	0	0	0	0
170	0	0	0	0	0	0	
175	0	0	0	0	0	0	0
180	0	0	0	0	0	0	



OPPOSITE SIDE TO BEAM  
INTENSITY (CANDLEPOWER) DATA

ANGLE	PLANE					AVERAGE	OUTPUT LUMENS
	ALONG	112.5	135	157.5	ACROSS		
0	364	364	364	364	364	364	
5	372	375	374	374	372	374	18
10	377	386	393	397	388	389	
15	388	402	404	389	384	395	56
20	408	421	404	403	404	408	
25	404	430	429	421	402	421	99
30	416	441	469	497	435	458	
35	427	444	525	557	460	492	157
40	406	437	594	690	553	550	
45	350	432	725	881	703	641	253
50	298	483	899	1146	956	789	
55	263	561	1030	1071	842	804	373
60	251	706	1056	1223	837	882	
65	257	840	959	855	509	759	370
70	261	728	790	595	301	598	
75	234	664	487	249	171	401	219
80	163	464	283	198	143	274	
85	85	267	190	162	120	180	101
90	38	131	154	132	102	122	
95	28	75	119	114	91	92	51
100	21	46	89	98	82	71	
105	15	28	63	80	69	53	29
110	12	18	42	61	58	39	
115	8	13	26	44	46	28	14
120	3	10	13	27	30	16	
125	2	7	5	13	18	9	4
130	1	4	2	4	7	4	
135	0	3	1	0	1	1	1
140	0	1	0	0	0	0	
145	0	0	0	0	0	0	0
150	0	0	0	0	0	0	
155	0	0	0	0	0	0	0
160	0	0	0	0	0	0	
165	0	0	0	0	0	0	0
170	0	0	0	0	0	0	
175	0	0	0	0	0	0	0
180	0	0	0	0	0	0	



COEFFICIENTS OF UTILIZATION

ZONAL CAVITY METHOD

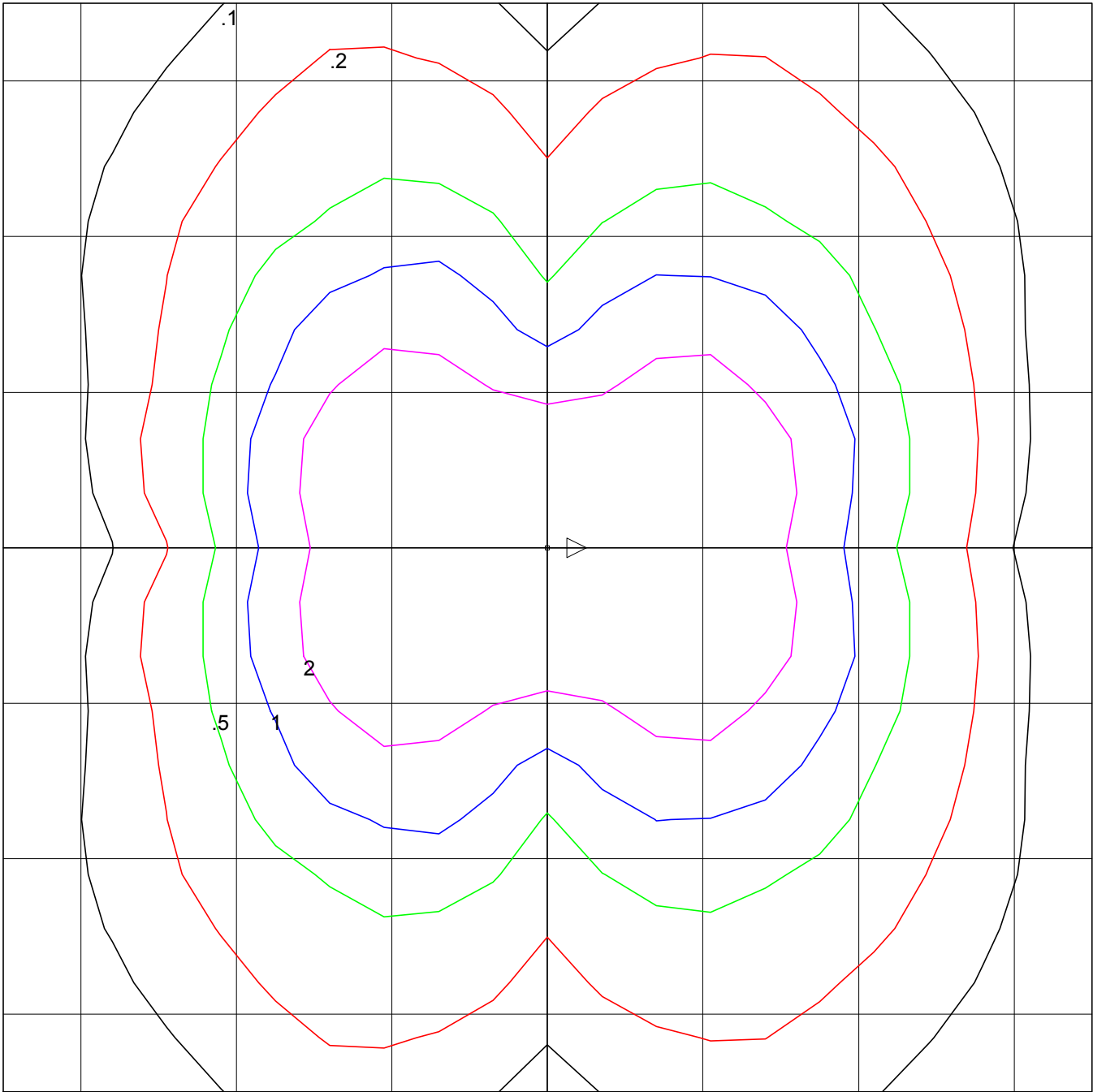
EFFECTIVE FLOOR CAVITY REFLECTANCE = .20

CC WALL	90				80				70				50				30				10				0	
	70	50	30	10	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																										
0	1.211	1.211	1.211	0.21	1.181	1.181	1.181	0.18	1.141	1.141	1.141	0.14	1.081	1.081	1.08	1.021	1.021	1.02	0.970	0.970	0.97	0.94				0.94
1	1.081	1.010	0.950	0.90	1.040	0.980	0.930	0.88	1.010	0.950	0.900	0.86	0.900	0.860	0.82	0.850	0.810	0.78	0.800	0.770	0.75	0.72				0.72
2	0.960	0.850	0.760	0.68	0.920	0.820	0.740	0.67	0.890	0.800	0.720	0.66	0.750	0.690	0.63	0.710	0.660	0.61	0.670	0.620	0.58	0.56				0.56
3	0.850	0.710	0.610	0.53	0.820	0.690	0.590	0.52	0.790	0.670	0.580	0.51	0.630	0.550	0.49	0.590	0.530	0.47	0.560	0.510	0.46	0.43				0.43
4	0.770	0.610	0.500	0.42	0.740	0.600	0.490	0.41	0.710	0.580	0.480	0.41	0.540	0.460	0.40	0.510	0.440	0.38	0.480	0.420	0.37	0.34				0.34
5	0.690	0.530	0.420	0.33	0.660	0.510	0.410	0.33	0.630	0.500	0.400	0.32	0.470	0.380	0.31	0.440	0.360	0.30	0.410	0.350	0.29	0.27				0.27
6	0.630	0.460	0.350	0.27	0.600	0.440	0.340	0.26	0.570	0.430	0.330	0.26	0.400	0.320	0.25	0.380	0.300	0.24	0.360	0.290	0.24	0.21				0.21
7	0.560	0.400	0.290	0.22	0.540	0.380	0.280	0.21	0.520	0.370	0.280	0.21	0.350	0.260	0.20	0.330	0.250	0.19	0.310	0.240	0.19	0.16				0.16
8	0.520	0.350	0.250	0.18	0.500	0.340	0.250	0.18	0.480	0.330	0.240	0.17	0.310	0.230	0.17	0.290	0.220	0.16	0.280	0.210	0.16	0.14				0.14
9	0.480	0.320	0.220	0.15	0.460	0.310	0.210	0.15	0.440	0.300	0.210	0.15	0.280	0.200	0.14	0.260	0.190	0.14	0.250	0.180	0.13	0.11				0.11
10	0.440	0.280	0.190	0.13	0.420	0.280	0.180	0.13	0.410	0.270	0.180	0.12	0.250	0.170	0.12	0.240	0.170	0.11	0.230	0.160	0.11	0.09				0.09

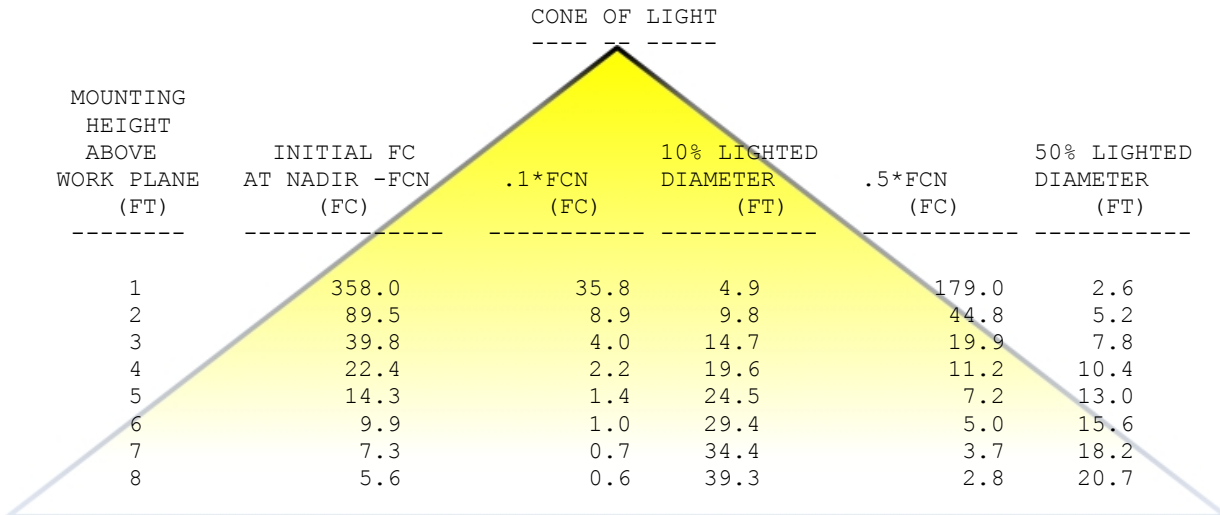
THE ABOVE COEFFICIENTS HAVE BEEN CALCULATED BASED ON LUMINAIRE LUMENS  
 BECAUSE IN AN ABSOLUTE TEST THE BARE LAMP LUMENS ARE UNKNOWN.  
 LIGHTING DESIGN CALCULATIONS MADE USING THESE COEFFICIENTS SHOULD  
 THEREFORE USE THE LUMINAIRE LUMENS IN THE CALCULATION FORMULA

LABORATORY RESULTS MAY NOT BE REPRESENTATIVE OF FIELD PERFORMANCE.  
 BALLAST AND FIELD FACTORS HAVE NOT BEEN APPLIED.

TEST DISTANCE EXCEEDS FIVE TIMES THE GREATEST  
 LUMINOUS OPENING OF LUMINAIRE.



Scale: 1 Inch = 8 Ft.  
Mounting Height = 8.00 Ft.  
Maximum Calculated Value = 4.61 Fc



10% CONE ANGLE: 135.7 DEGREES  
 50% CONE ANGLE: 104.7 DEGREES