



7036 Snowdrift Road Suite 200  
Allentown, PA 18106  
610-774-1300

## Photometric Indoor Test Report

Prepared For  
Encapsulite International Inc  
Brian Pierson  
1220 Bamore Road  
Rosenberg, TX 77471-3027

Catalog Number  
WGP78LED  
Project Number  
10241135  
Test Number  
510226

Test Date

2014-02-28

Prepared By

Handwritten signature of Kyle Spaziani in black ink.

Kyle Spaziani, Project Handler

Approved By

Handwritten signature of Jeffrey M. Lockner in black ink.

Jeffrey Lockner, Engineer

The results contained in this report pertain only to the tested sample.  
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Luminaire Description: Formed plastic housing, aluminum heatsink, clear plastic tube enclosure  
Catalog Number: WGP78LED  
Lamp: 288 white LEDs  
Mounting: Horizontal  
Ballast/Driver: Two Universal D310CQ50UNVA-A10C  
Note: The 8' distribution and electrical data was generated by prorating the testing of a 4' sample, test report #438508.

Luminaire

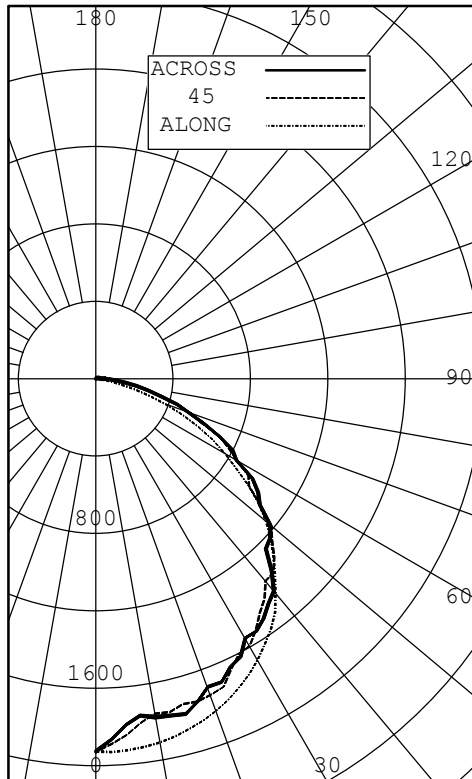


Test Conditions

Test Temperature:	25.2 °C
Voltage:	120.0 VAC
Current:	0.4410 A
Power:	52.48 W
Power Factor:	0.992
Frequency:	60 Hz
Current THD:	9.70 %



INTENSITY (CANDLEPOWER) SUMMARY OUTPUT LUMENS



ANGLE	ALONG	22.5	45	67.5	ACROSS	OUTPUT LUMENS
0	1926	1926	1926	1926	1926	
5	1927	1892	1848	1817	1798	178
15	1873	1752	1741	1786	1796	501
25	1758	1648	1656	1676	1645	768
35	1580	1523	1478	1519	1513	944
45	1301	1214	1305	1286	1242	982
55	964	940	966	1003	1024	878
65	582	645	707	714	704	654
75	207	316	327	372	353	347
85	15	75	103	115	110	106
90	2	31	46	51	49	
95	1	19	27	27	24	25
105	1	7	17	18	17	13
115	0	2	9	12	12	7
125	0	1	5	6	6	3
135	0	0	2	4	4	2
145	0	0	1	2	2	1
155	0	0	1	1	1	0
165	0	0	0	1	1	0
175	0	1	1	1	1	0
180	0	0	0	0	0	

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LUMINAIRE
0-30	1447	26.74
0-40	2391	44.18
0-60	4251	78.55
0-90	5360	99.03
40-90	2969	54.86
60-90	1108	20.48
90-180	52	0.97
0-180	5412	100.00

EFFICACY (LUMENS PER WATT): 103.1

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

LUMINOUS LENGTH: 88.000 INS  
 WIDTH: 1.500 INS

LUMINANCE SUMMARY CD./SQ.M.

S/MH: 1.2  
 SC (ALONG): 1.3, SC (ACROSS): 1.2

ANGLE	ALONG	45	ACROSS
45	21599	21750	20697
55	19735	19855	21051
65	16159	19699	19638
75	9391	14853	16090
85	2047	13872	14809

TESTED IN ACCORDANCE WITH IES PROCEDURES.



INTENSITY (CANDLEPOWER) DATA

ANGLE	PLANE						OUTPUT LUMENS
	ALONG	22.5	45	67.5	ACROSS	AVERAGE	
0	1926	1926	1926	1926	1926	1926	
5	1927	1892	1848	1817	1798	1855	178
10	1909	1830	1759	1791	1778	1806	
15	1873	1752	1741	1786	1796	1778	501
20	1826	1682	1739	1710	1695	1723	
25	1758	1648	1656	1676	1645	1670	768
30	1675	1585	1594	1595	1548	1596	
35	1580	1523	1478	1519	1513	1516	944
40	1443	1379	1366	1424	1432	1402	
45	1301	1214	1305	1286	1242	1269	982
50	1150	1092	1184	1165	1178	1151	
55	964	940	966	1003	1024	976	878
60	770	769	844	863	840	820	
65	582	645	707	714	704	677	654
70	386	463	530	502	513	486	
75	207	316	327	372	353	324	347
80	74	185	203	218	216	188	
85	15	75	103	115	110	89	106
90	2	31	46	51	49	38	
95	1	19	27	27	24	21	25
100	1	12	21	21	21	16	
105	1	7	17	18	17	13	13
110	0	4	13	15	14	10	
115	0	2	9	12	12	7	7
120	0	2	6	9	9	5	
125	0	1	5	6	6	4	3
130	0	0	3	5	5	3	
135	0	0	2	4	4	2	2
140	0	0	2	3	3	2	
145	0	0	1	2	2	1	1
150	0	0	1	1	2	1	
155	0	0	1	1	1	1	0
160	1	0	0	1	0	0	
165	0	0	0	1	1	0	0
170	1	0	0	1	1	0	
175	0	1	1	1	1	1	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	1.221	.221	.221	.221	1.191	.191	.191	.191	1.161	.161	.161	.161	1.111	.111	.111	1.061	.061	.061	1.011	.011	.011	0.99			
1	1.121	.071	.030	.99	1.091	.051	.010	.97	1.071	.030	.990	.95	0.980	.950	.92	0.940	.920	.89	0.900	.880	.86	0.84			
2	1.030	.950	.880	.82	1.000	.930	.860	.81	0.980	.910	.850	.80	0.870	.820	.78	0.840	.800	.76	0.810	.770	.74	0.72			
3	0.940	.830	.750	.69	0.920	.820	.740	.68	0.890	.800	.730	.68	0.770	.710	.66	0.740	.690	.65	0.720	.680	.64	0.62			
4	0.870	.750	.660	.59	0.850	.730	.650	.59	0.820	.720	.640	.58	0.690	.630	.57	0.670	.610	.57	0.650	.600	.56	0.54			
5	0.800	.670	.580	.51	0.780	.660	.570	.50	0.750	.640	.560	.50	0.620	.550	.50	0.600	.540	.49	0.580	.530	.48	0.46			
6	0.740	.600	.510	.44	0.720	.590	.500	.44	0.700	.580	.490	.43	0.560	.490	.43	0.540	.470	.43	0.520	.470	.42	0.40			
7	0.670	.530	.440	.39	0.660	.520	.440	.38	0.640	.520	.430	.38	0.500	.420	.37	0.480	.420	.37	0.470	.410	.36	0.35			
8	0.620	.480	.400	.34	0.610	.470	.390	.33	0.590	.470	.390	.33	0.450	.380	.33	0.440	.370	.33	0.430	.370	.32	0.30			
9	0.580	.440	.350	.29	0.560	.430	.350	.29	0.550	.420	.350	.29	0.410	.340	.29	0.400	.330	.29	0.390	.330	.28	0.27			
10	0.530	.400	.310	.26	0.520	.390	.310	.26	0.510	.390	.310	.26	0.380	.300	.26	0.370	.300	.25	0.360	.300	.25	0.23			

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.