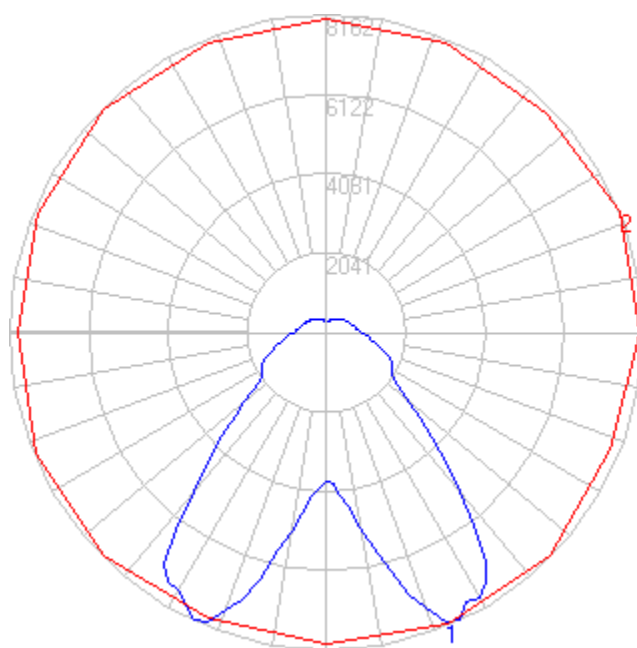




10163 US HWY 31 North, Charlevoix, MI 49720 231-547-6584

Test Report Number	06057
Date of Test	5/30/2017
Manufacturer	A.L.P.-LEXALITE
Catalog Number	BT-HL200W
Test Item	BETOP LED POD WITH 350 LEDS IN A CIRCULAR PATTERN WITH FLAT CLEAR LENS, LUMIEO S16 AND A/C FC 16" C.D.L.
Lamp	HL200W-350L
Operating Orientation	PENDENT
Driver Type	INTERNAL
Test Time	90 MINUTES
Ambient Temperature (C)	24.9
Stabilization Time	67 MINUTES
Power Factor	.992
Power (W)	198.38
Voltage(V)	120.01
Current(A)	1.6664
Notes	DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (120Vac, 60Hz)
Luminous Flux	23355.95
Luminous Efficacy	117.73
Test Distance	22.25 FEET
Test Equipment	GONIOPHOTOMETER
LAB Test Method Reference	IESNA LM-79-08
Technician	CG
Spacing Criterion(0-180)	1.82
Spacing Criterion(90-270)	1.80
Spacing Criterion(diagonal)	1.58
Sample Width(mm)	
Sample Height/Depth(mm)	
Luminous Diameter/Length(mm)	
Luminous Width(mm)	
Luminous Height/Depth(mm)	



Coefficient of Utilization

Coefficients Of Utilization - Zonal Cavity Method
Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
RW70	50	30	10		70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	115	115	115	115	111	111	111	111	102	102	102	95	95	95	88	88	88	84
1	104	99	95	91	100	96	92	88	89	85	82	82	79	77	76	74	72	69
2	95	87	80	75	91	84	78	72	78	73	68	72	68	65	67	64	61	58
3	87	77	69	63	83	74	67	61	69	63	58	64	59	55	60	56	52	50
4	80	69	60	54	77	66	58	52	62	55	50	58	52	48	54	49	46	43
5	74	62	53	47	71	60	52	46	56	49	44	52	46	42	49	44	40	38
6	68	56	47	41	66	54	46	40	51	44	39	47	42	37	45	39	36	33
7	64	51	42	36	61	49	41	36	46	39	34	43	37	33	41	36	32	30
8	59	46	38	32	57	45	37	32	42	35	31	40	34	30	38	32	29	26
9	55	42	34	29	53	41	34	29	39	32	28	37	31	27	35	30	26	24
10	52	39	31	26	50	38	31	26	36	29	25	34	28	24	32	27	23	22

Zonal Lumen Summary

	Summary Zonal Lumens	Zonal Lumens-% Lamp	Zonal Lumens-% Fixture
0-30	5944.67		25.45%
0-40	10490.32		44.91%
0-60	15302.11		65.52%
0-90	19638.14		84.08%
90-110	1583.78		6.78%
90-130	2672.08		11.44%
90-150	3423.94		14.66%
90-180	3717.81		15.92%

	Zonal Lumens		Zonal Lumens
0-10	403.49	170-180	25.50
10-20	1814.51	160-170	92.60
20-30	3726.67	150-160	175.77
30-40	4545.65	140-150	266.29
40-50	2942.63	130-140	485.57
50-60	1869.16	120-130	485.57
60-70	1796.09	110-120	602.73
70-80	1446.61	100-110	725.28
80-90	1093.33	90-100	858.50

Candela Table

	0.00	22.50	45.00	67.50	90.00	112.50	135.00	157.50	180.00	202.50	225.00	247.50	270.00	292.50	315.00	337.50	360.00
0.00	3841.6	3841.6	3841.6	3841.6	3841.6	3841.6	3841.6	3841.6	3841.6	3841.6	3841.6	3841.6	3841.6	3841.6	3841.6	3841.6	3841.6
2.50	3910.6	3916.4	3988.2	3931.1	3937.5	3930.2	3859.4	3897.2	3923.9	3973.6	3969.3	3912.1	3983.5	3961.4	3944.7	4007.6	3910.6
5.00	4244.4	4209.2	4260.6	4258.6	4226.3	4185.7	4149.0	4093.6	4243.9	4232.3	4264.4	4285.5	4260.4	4327.3	4360.9	4356.3	4244.4
7.50	4570.1	4561.8	4620.4	4577.4	4559.4	4574.3	4520.4	4456.6	4646.4	4705.1	4624.1	4622.4	4675.5	4744.3	4810.3	4861.1	4570.1
10.00	4992.2	5077.8	5072.1	5056.1	5105.2	4997.2	4938.5	4896.1	5123.8	5192.9	5023.1	5053.7	5126.7	5310.2	5266.0	5139.2	4992.2
12.50	5687.1	5645.9	5709.2	5746.1	5622.4	5585.7	5595.6	5498.7	5753.9	5729.9	5788.3	5830.5	5731.9	5796.6	5958.0	5997.8	5687.1
15.00	6260.9	6293.2	6363.8	6420.5	6378.7	6300.9	6237.3	6234.3	6503.2	6570.4	6563.0	6397.5	6330.8	6497.3	6554.6	6831.6	6260.9
17.50	7076.7	7117.6	6974.0	7061.7	7119.7	7052.0	7015.2	6922.3	7120.9	7205.7	7111.5	7047.6	7043.4	7132.9	7300.0	7454.1	7076.7
20.00	7647.1	7553.5	7558.7	7544.1	7558.2	7544.8	7535.1	7524.0	7533.4	7575.0	7570.4	7562.5	7649.9	7725.3	7694.8	7708.1	7647.1
22.50	7987.9	8052.6	7925.1	8045.8	7874.0	7859.3	7924.2	7915.6	7893.3	8043.8	7850.6	7891.5	7994.6	8109.4	8154.1	7977.1	7987.9
25.00	8057.7	8162.2	7971.1	8062.7	8045.0	8030.5	8117.1	8071.4	7937.7	8129.6	8112.8	7934.5	8005.3	8107.1	8137.8	7892.1	8057.7
27.50	7951.5	7830.4	7755.8	7688.0	7937.3	8027.1	8004.3	7963.5	8112.9	7877.3	7721.1	7653.8	7888.2	7887.5	7679.8	7841.7	7951.5
30.00	7744.8	7869.0	7812.5	7758.1	7550.1	7480.5	7630.2	7718.6	7635.3	7658.8	7685.0	7725.9	7781.9	7597.6	7586.3	7667.8	7744.8
32.50	7678.7	7607.3	7705.2	7570.9	7572.5	7598.0	7657.2	7609.7	7543.1	7608.8	7563.0	7571.0	7607.9	7566.0	7373.2	7577.4	7678.7
35.00	7285.0	7200.1	7156.7	7184.6	7302.0	7303.6	7408.9	7365.8	7212.8	7292.1	7257.6	7147.5	7241.3	7184.5	7121.4	7102.2	7285.0
37.50	6432.1	6271.2	6366.0	6424.1	6523.4	6524.6	6632.9	6668.1	6331.5	6377.7	6526.9	6381.7	6339.8	6362.5	6201.2	6206.5	6432.1
40.00	5458.1	5356.1	5392.0	5377.9	5421.6	5437.1	5662.3	5658.4	5359.2	5342.6	5391.2	5371.5	5293.1	5217.6	5122.2	5124.6	5458.1
42.50	4498.3	4535.8	4451.5	4433.8	4402.1	4539.1	4616.6	4688.9	4408.6	4445.7	4391.0	4380.4	4362.1	4329.1	4273.9	4316.3	4498.3
45.00	3882.0	3838.5	3799.7	3787.9	3792.0	3875.3	3924.3	3917.7	3749.6	3780.1	3760.1	3786.9	3749.3	3731.3	3674.3	3700.4	3882.0
47.50	3249.6	3252.1	3248.3	3258.0	3288.4	3325.3	3397.2	3372.8	3165.2	3193.9	3226.0	3220.6	3234.8	3208.5	3131.4	3119.0	3249.6
50.00	2823.3	2821.0	2805.4	2837.4	2853.0	2801.9	2863.7	2883.3	2769.4	2784.9	2792.8	2775.2	2781.0	2778.5	2699.1	2691.8	2823.3
52.50	2430.5	2455.1	2447.1	2436.0	2414.0	2419.0	2467.8	2516.9	2375.6	2378.9	2419.7	2369.8	2374.4	2350.1	2325.4	2323.1	2430.5
55.00	2123.1	2130.1	2120.4	2074.3	2072.8	2076.1	2093.5	2142.6	2064.7	2064.1	2074.0	2054.5	2063.0	2046.6	2051.7	2049.9	2123.1
57.50	1994.7	2005.4	1990.6	1971.9	1953.3	1947.5	1947.0	1969.0	1950.2	1952.7	1954.8	1956.1	1960.3	1952.7	1962.8	1975.7	1994.7
60.00	1967.0	1967.1	1956.4	1943.7	1926.5	1917.1	1919.7	1926.6	1913.4	1917.9	1917.9	1920.3	1924.0	1919.7	1924.7	1941.6	1967.0
62.50	1926.9	1924.6	1913.4	1900.8	1883.4	1873.7	1877.2	1885.4	1861.5	1862.7	1863.6	1865.9	1870.1	1865.1	1870.0	1886.8	1926.9
65.00	1851.5	1849.4	1840.3	1830.1	1815.2	1806.6	1811.5	1817.4	1780.5	1782.1	1779.8	1782.5	1784.8	1780.6	1785.3	1799.7	1851.5
67.50	1750.1	1745.8	1738.0	1732.8	1718.5	1711.5	1715.8	1719.7	1675.3	1674.7	1669.8	1670.5	1677.2	1673.4	1677.1	1690.4	1750.1
70.00	1633.2	1629.5	1623.2	1618.3	1606.8	1601.8	1605.8	1605.5	1561.0	1560.2	1550.2	1552.6	1558.9	1557.7	1561.2	1572.8	1633.2
72.50	1519.2	1517.5	1510.8	1506.2	1496.5	1493.7	1496.6	1495.2	1448.5	1448.1	1437.2	1438.6	1445.1	1443.7	1445.5	1457.7	1519.2
75.00	1405.6	1406.2	1399.4	1396.6	1388.0	1385.4	1387.5	1386.5	1338.7	1339.2	1326.9	1327.2	1332.3	1332.9	1335.2	1351.0	1405.6
77.50	1296.3	1298.0	1291.3	1290.4	1282.2	1280.8	1281.8	1279.8	1235.8	1234.8	1223.9	1224.4	1229.4	1227.9	1232.1	1245.8	1296.3
80.00	1194.7	1197.3	1191.4	1190.3	1182.7	1183.5	1183.6	1179.7	1141.8	1142.2	1129.7	1131.5	1135.6	1135.7	1139.1	1153.3	1194.7
82.50	1104.5	1106.8	1101.0	1099.8	1094.6	1096.5	1095.4	1090.0	1057.8	1058.1	1048.3	1048.5	1052.2	1053.2	1055.6	1068.2	1104.5
85.00	1025.0	1027.0	1021.0	1019.7	1016.9	1018.4	1017.2	1012.5	983.9	984.1	975.8	975.5	977.4	979.7	983.1	994.1	1025.0
87.50	954.9	957.3	951.5	950.0	948.8	949.9	948.3	943.7	919.2	919.2	912.4	910.2	912.8	915.1	919.1	927.3	954.9
90.00	893.0	894.1	889.8	889.0	887.5	888.5	887.7	882.9	862.8	862.6	855.4	854.8	856.2	859.2	863.1	870.4	893.0
92.50	842.7	843.5	839.7	837.9	835.6	838.0	836.0	830.5	814.8	814.9	808.6	808.2	810.0	813.0	816.9	823.5	842.7
95.00	800.4	802.3	799.3	797.5	794.9	796.9	794.1	790.1	776.0	774.9	770.3	769.4	770.7	774.7	779.2	786.0	800.4
97.50	770.2	772.5	769.4	767.5	764.1	764.4	761.0	757.4	745.8	744.5	740.5	738.7	740.6	744.6	750.0	757.5	770.2
100.00	739.9	741.9	739.1	737.9	735.6	735.6	732.7	729.3	720.4	719.0	714.6	713.2	715.0	718.0	723.0	728.8	739.9
102.50	715.7	717.8	715.3	714.6	712.5	712.2	710.0	706.8	699.0	697.8	693.5	692.0	693.3	696.2	700.8	705.7	715.7
105.00	694.7	696.3	694.1	694.1	692.1	691.8	689.8	687.1	679.9	678.5	674.1	671.9	672.9	675.7	680.6	685.6	694.7
107.50	673.3	675.0	673.6	674.2	672.5	672.1	669.6	667.8	660.1	658.7	654.6	652.0	652.9	655.2	659.5	663.7	673.3
110.00	650.8	652.1	650.9	651.3	650.1	649.8	648.2	647.4	640.2	639.4	635.3	632.9	633.4	635.6	639.0	642.8	650.8
112.50	630.9	631.7	630.6	631.2	630.2	629.3	628.5	627.5	621.9	620.7	616.8	615.0	615.2	617.4	620.0	623.2	630.9
115.00	612.8	612.8	612.2	612.9	611.7	610.8	610.0	609.7	604.7	603.2	599.5	598.1	598.4	599.9	602.9	606.3	612.8
117.50	596.5	596.6	595.6	596.0	595.3	594.5	593.4	593.5	588.5	586.8	583.4	581.5	581.9	583.7	586.5	589.4	596.5

120.00	580.2	580.0	579.3	580.1	579.1	578.3	577.1	577.4	572.2	570.7	566.8	564.8	565.3	567.2	569.9	573.3	580.2
122.50	564.0	563.4	563.2	563.5	562.9	562.0	561.1	560.9	555.8	554.6	550.7	548.7	549.4	551.2	553.8	556.8	564.0
125.00	547.5	546.6	546.5	546.8	546.5	545.5	544.5	544.3	538.8	537.3	533.7	532.2	532.6	534.6	537.5	540.2	547.5
127.50	531.3	530.4	530.2	530.2	530.1	528.7	527.8	527.7	521.7	520.6	517.4	516.4	516.1	518.3	520.9	523.7	531.3
130.00	515.0	514.5	514.6	514.4	513.8	512.8	512.0	512.1	505.6	504.2	501.4	500.2	500.7	502.5	505.2	507.8	515.0
132.50	499.4	498.9	498.7	498.8	498.4	497.1	496.1	496.0	489.8	488.6	485.7	484.7	485.1	487.0	489.4	491.8	499.4
135.00	483.9	483.2	483.6	483.3	483.3	482.0	481.1	480.8	474.2	472.6	470.0	469.5	469.7	471.5	473.9	475.9	483.9
137.50	468.7	468.2	468.8	468.2	468.5	466.9	466.2	465.8	459.0	458.0	455.9	455.1	455.1	456.6	458.8	460.7	468.7
140.00	455.0	454.3	454.9	454.3	454.3	453.1	452.7	452.2	445.4	444.3	442.5	441.4	441.6	443.0	445.4	447.0	455.0
142.50	441.9	441.5	442.0	440.9	441.1	439.7	439.4	439.0	432.8	431.8	430.1	428.9	429.2	430.5	432.6	433.9	441.9
145.00	429.3	428.9	428.9	428.3	428.1	427.0	426.4	426.4	420.8	420.1	418.2	417.6	417.4	418.8	421.0	421.9	429.3
147.50	417.4	416.7	416.4	415.9	415.8	414.7	414.6	413.7	409.5	409.2	407.8	406.6	406.4	407.7	409.5	410.2	417.4
150.00	405.7	404.6	404.4	404.2	404.1	402.9	403.3	402.6	399.5	399.2	397.7	396.7	396.3	397.3	399.0	399.7	405.7
152.50	393.8	392.8	393.0	392.5	392.5	391.1	392.5	392.0	390.8	390.5	388.9	387.0	386.6	387.7	388.9	387.9	393.8
155.00	381.4	380.3	380.4	380.6	380.3	378.4	380.8	381.1	381.6	380.8	379.1	377.4	377.1	378.0	378.8	376.2	381.4
157.50	368.2	367.4	367.5	368.7	368.4	365.5	368.9	369.6	371.4	371.0	369.0	367.7	366.7	367.1	367.6	364.4	368.2
160.00	354.8	354.2	354.7	355.9	355.9	353.3	356.9	357.9	360.5	359.7	358.5	356.5	355.7	355.2	354.7	352.3	354.8
162.50	340.5	339.9	340.9	342.4	343.3	340.8	343.1	345.2	347.3	346.7	345.5	344.1	343.4	342.7	340.4	339.6	340.5
165.00	323.9	323.5	325.0	326.5	327.3	324.6	327.8	330.5	332.0	330.9	329.9	329.6	328.9	328.5	324.7	324.9	323.9
167.50	306.2	305.5	307.5	309.4	310.0	307.6	312.2	313.7	315.2	314.8	312.6	314.2	313.4	312.6	308.6	308.9	306.2
170.00	288.0	288.6	289.9	291.3	291.5	291.0	295.6	296.9	298.0	297.4	296.6	297.8	297.3	295.9	295.3	291.7	288.0
172.50	268.7	269.5	271.1	273.0	273.3	274.0	278.4	279.3	279.4	278.8	278.6	279.7	280.1	278.3	277.2	274.8	268.7
175.00	260.8	261.7	264.0	266.7	266.2	268.3	269.2	269.4	271.4	269.2	269.6	272.3	273.6	272.9	273.2	274.1	260.8
177.50	269.3	267.9	270.0	273.4	273.0	275.7	276.9	277.1	273.6	272.0	272.5	274.7	278.8	277.9	278.5	279.8	269.3
180.00	278.5	278.5	278.5	278.5	278.5	278.5	278.5	278.5	278.5	278.5	278.5	278.5	278.5	278.5	278.5	278.5	278.5