

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P257119

Luminaire Tested: **HGL-S-UF-40L940-UNV-12**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P257119
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1708-204-13)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: HGL-S-UF-40L940-UNV-12
Description: HUGO 12 FOOT LINEAR LED LUMINAIRE WITH FROSTED LENS WITH UPLIGHT
Light Source: (504) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9243.7 lumens
Efficiency: N/A
Efficacy: 107.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.32 / 1.4
Luminous Opening: Rectangular w/ Sides (W: 0.23' x L: 12' x H: 0.1')
CIE Type: Semi-Direct

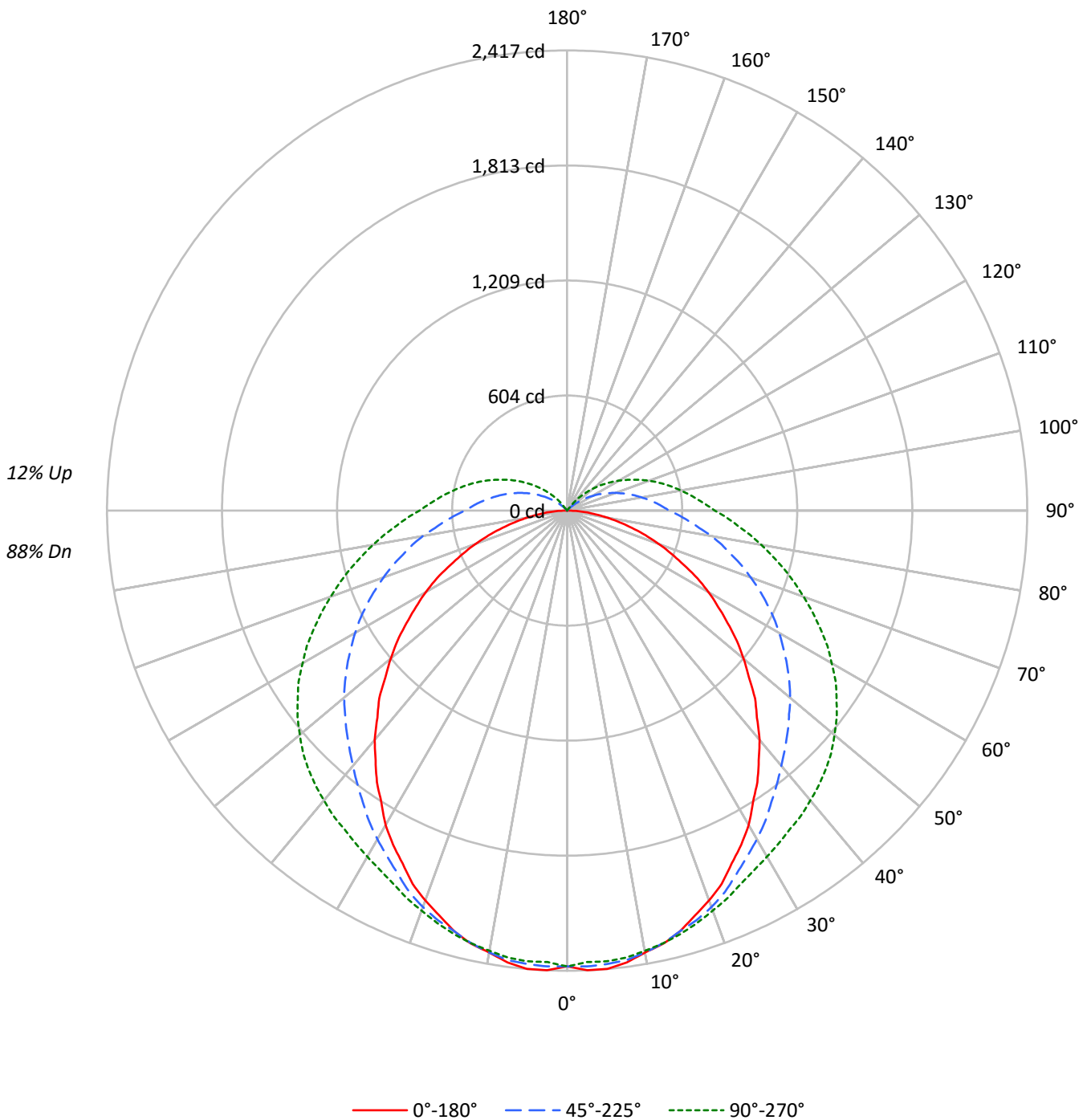
Input Watts (W): 85.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P257119

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	116	116	116	116	112	112	112	112	105	105	105	98	98	98	91	91	91	88																				
1	103	97	92	87	99	94	89	85	87	84	80	81	78	75	76	73	71	68																				
2	93	84	76	69	89	81	73	67	75	69	64	70	65	61	65	61	58	55																				
3	84	73	64	56	81	70	62	55	65	58	53	61	55	50	57	52	48	45																				
4	77	64	54	47	73	62	53	46	58	50	44	54	48	42	50	45	41	38																				
5	70	57	47	40	67	55	46	39	51	44	38	48	42	36	45	39	35	32																				
6	65	51	42	35	62	49	41	34	46	39	33	43	37	32	41	35	31	28																				
7	60	46	37	31	58	45	36	30	42	34	29	39	33	28	37	31	27	25																				
8	56	42	33	27	54	41	32	27	38	31	26	36	30	25	34	28	24	22																				
9	52	38	30	24	50	37	29	24	35	28	23	33	27	22	31	26	22	20																				
10	49	35	27	22	47	34	27	22	33	26	21	31	25	20	29	24	20	18																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9369	9369	9369
5°	9488	9132	8981
10°	9352	8855	8640
15°	9250	8523	8316
20°	9049	8249	7993
25°	8795	7886	7705
30°	8579	7576	7515
35°	8272	7270	7402
40°	7979	7015	7352
45°	7659	6833	7314
50°	7291	6701	7241
55°	6940	6555	7148
60°	6617	6428	7027
65°	6136	6301	6881
70°	5722	6184	6724
75°	5153	6072	6609
80°	4546	6068	6522
85°	3857	6092	6509



TEST NUMBER: P257119

CATALOG NUMBER: HGL-S-UF-40L940-UNV-12

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	226.7	2.5
10°-20°	644.7	7.0
20°-30°	967.3	10.5
30°-40°	1174.5	12.7
40°-50°	1268.5	13.7
50°-60°	1242.4	13.4
60°-70°	1102.0	11.9
70°-80°	882.7	9.5
80°-90°	639.7	6.9
90°-100°	450.9	4.9
100°-110°	314.5	3.4
110°-120°	194.7	2.1
120°-130°	99.0	1.1
130°-140°	34.3	0.4
140°-150°	1.6	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1838.8	19.9
0°-40°	3013.2	32.6
0°-60°	5524.2	59.8
0°-90°	8148.6	88.2
90°-120°	960.1	10.4
90°-150°	1095.0	11.8
90°-180°	1095.0	11.8
0°-180°	9243.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2394	2394	2394	2394	2394	
5°	2417	2394	2391	2379	2377	229
15°	2288	2271	2288	2308	2302	643
25°	2045	2050	2105	2139	2162	944
35°	1742	1753	1870	1982	2042	1088
45°	1396	1433	1639	1842	1922	1072
55°	1030	1115	1410	1642	1727	923
65°	675	835	1158	1381	1467	674
75°	352	575	892	1107	1178	376
85°	94	352	644	835	898	102
90°	3	257	535	712	775	7
95°	0	203	466	632	686	0
105°	0	109	335	483	532	0
115°	0	34	212	340	383	0
125°	0	0	103	209	246	0
135°	0	0	17	92	120	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	0



TEST NUMBER: P257119

CATALOG NUMBER: HGL-S-UF-40L940-UNV-12

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2393.7	2393.7	2393.7	2393.7	2393.7	2393.7	2393.7	2393.7	2393.7	2393.7	2393.7
2.5°	2416.6	2413.8	2405.2	2396.6	2393.7	2393.7	2390.9	2388.0	2388.0	2385.2	2396.6
5°	2416.6	2413.8	2405.2	2393.7	2390.9	2393.7	2390.9	2385.2	2385.2	2382.3	2390.9
7.5°	2393.7	2388.0	2382.3	2373.7	2370.9	2370.9	2368.0	2368.0	2368.0	2368.0	2382.3
10°	2356.6	2353.7	2348.0	2339.4	2339.4	2336.5	2336.5	2339.4	2339.4	2342.3	2356.6
12.5°	2330.8	2325.1	2316.5	2307.9	2305.1	2305.1	2302.2	2299.4	2302.2	2305.1	2328.0
15°	2287.9	2285.1	2279.3	2270.8	2270.8	2270.8	2270.8	2267.9	2267.9	2270.8	2287.9
17.5°	2230.7	2225.0	2222.1	2216.4	2219.3	2222.1	2225.0	2222.1	2227.9	2236.4	2256.5
20°	2179.2	2173.5	2167.8	2159.2	2159.2	2162.1	2164.9	2164.9	2179.2	2190.7	2216.4
22.5°	2122.0	2119.2	2113.5	2110.6	2110.6	2113.5	2113.5	2107.7	2116.3	2133.5	2167.8
25°	2044.8	2042.0	2039.1	2039.1	2044.8	2050.5	2053.4	2056.3	2064.8	2076.3	2104.9
27.5°	1979.0	1976.2	1970.5	1964.7	1970.5	1976.2	1979.0	1984.8	2001.9	2024.8	2047.7
30°	1907.6	1904.7	1901.8	1901.8	1907.6	1910.4	1913.3	1910.4	1933.3	1967.6	1993.3
32.5°	1816.0	1813.2	1816.0	1816.0	1830.3	1838.9	1844.6	1847.5	1867.5	1899.0	1936.1
35°	1741.7	1741.7	1738.8	1744.5	1747.4	1753.1	1758.8	1773.1	1801.7	1833.2	1870.4
37.5°	1653.0	1653.0	1653.0	1667.3	1678.8	1681.6	1684.5	1701.6	1738.8	1770.3	1810.3
40°	1572.9	1572.9	1572.9	1578.7	1587.2	1595.8	1607.3	1627.3	1664.5	1710.2	1750.3
42.5°	1475.7	1478.6	1484.3	1498.6	1510.0	1515.7	1524.3	1555.8	1595.8	1650.2	1693.1
45°	1395.6	1392.8	1398.5	1409.9	1421.4	1432.8	1447.1	1481.4	1530.0	1590.1	1638.7
47.5°	1295.5	1298.4	1304.1	1324.1	1338.4	1352.7	1369.9	1409.9	1467.1	1527.2	1581.5
50°	1209.7	1212.6	1226.9	1238.3	1252.6	1269.8	1289.8	1341.3	1404.2	1464.3	1530.0
52.5°	1123.9	1126.8	1138.2	1146.8	1169.7	1189.7	1215.5	1272.7	1338.4	1404.2	1470.0
55°	1029.6	1035.3	1043.9	1063.9	1092.5	1115.4	1144.0	1206.9	1272.7	1344.2	1409.9
57.5°	940.9	943.8	958.1	978.1	1012.4	1041.0	1075.3	1141.1	1212.6	1281.2	1347.0
60°	858.0	863.7	872.3	898.0	943.8	972.4	1006.7	1075.3	1149.7	1218.3	1287.0
62.5°	772.2	777.9	789.3	817.9	872.3	903.7	940.9	1012.4	1086.8	1155.4	1224.0
65°	674.9	680.7	697.8	735.0	800.8	835.1	872.3	946.6	1018.1	1089.6	1158.3
67.5°	592.0	594.9	617.7	657.8	726.4	769.3	809.4	880.8	952.3	1023.8	1092.5
70°	511.9	517.6	534.8	589.1	663.5	697.8	740.7	817.9	889.4	960.9	1026.7
72.5°	431.8	437.6	463.3	523.4	600.6	637.8	672.1	755.0	826.5	895.1	960.9
75°	351.8	360.3	394.7	463.3	537.7	574.8	612.0	686.4	763.6	829.4	892.3
77.5°	280.3	288.8	331.7	403.2	477.6	514.8	552.0	623.5	695.0	766.5	832.2
80°	211.6	223.1	274.6	346.0	420.4	457.6	491.9	566.3	634.9	700.7	769.3
82.5°	151.6	165.9	225.9	294.6	368.9	403.2	437.6	509.1	577.7	640.6	700.7
85°	94.4	120.1	180.2	246.0	317.4	351.8	386.1	457.6	523.4	586.3	643.5
87.5°	45.8	80.1	137.3	200.2	268.8	303.1	337.5	406.1	469.0	531.9	589.1
90°	2.9	45.8	97.2	157.3	225.9	257.4	291.7	357.5	420.4	480.5	534.8
92.5°	0.0	28.6	77.2	134.4	197.3	231.7	263.1	328.9	388.9	449.0	500.5
95°	0.0	14.3	60.1	114.4	174.5	203.1	234.5	297.4	357.5	414.7	466.2
97.5°	0.0	2.9	42.9	91.5	148.7	180.2	208.8	268.8	328.9	383.2	431.8
100°	0.0	0.0	28.6	74.4	125.8	154.4	183.0	240.2	297.4	348.9	397.5
102.5°	0.0	0.0	14.3	57.2	105.8	131.6	157.3	214.5	268.8	320.3	366.1
105°	0.0	0.0	2.9	40.0	85.8	108.7	134.4	185.9	240.2	288.8	334.6
107.5°	0.0	0.0	0.0	22.9	65.8	88.7	111.5	160.2	211.6	257.4	300.3
110°	0.0	0.0	0.0	11.4	48.6	68.6	91.5	137.3	183.0	228.8	271.7



TEST NUMBER: P257119

CATALOG NUMBER: HGL-S-UF-40L940-UNV-12

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.0	0.0	0.0	2.9	31.5	51.5	71.5	114.4	157.3	200.2	240.2
115°	0.0	0.0	0.0	0.0	17.2	34.3	51.5	91.5	131.6	174.5	211.6
117.5°	0.0	0.0	0.0	0.0	5.7	20.0	34.3	71.5	108.7	145.9	183.0
120°	0.0	0.0	0.0	0.0	0.0	8.6	20.0	51.5	85.8	120.1	154.4
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	5.7	31.5	62.9	97.2	128.7
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.2	42.9	74.4	103.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7	25.7	51.5	77.2
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.4	31.5	54.3
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	17.2	34.3
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7	17.2
137.5°	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7
140°	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P257119

CATALOG NUMBER: HGL-S-UF-40L940-UNV-12

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	2393.7	2393.7	2393.7	2393.7	2393.7	2393.7	2393.7	2393.7	2393.7	2393.7
2.5°	2405.2	2393.7	2393.7	2390.9	2388.0	2385.2	2379.4	2376.6	2370.9	2373.7
5°	2399.5	2388.0	2388.0	2382.3	2379.4	2379.4	2376.6	2376.6	2373.7	2376.6
7.5°	2390.9	2376.6	2376.6	2370.9	2368.0	2365.1	2365.1	2365.1	2365.1	2368.0
10°	2368.0	2359.4	2359.4	2356.6	2353.7	2348.0	2345.1	2348.0	2345.1	2348.0
12.5°	2336.5	2328.0	2333.7	2333.7	2333.7	2328.0	2325.1	2328.0	2325.1	2328.0
15°	2296.5	2293.6	2302.2	2305.1	2307.9	2305.1	2302.2	2302.2	2302.2	2302.2
17.5°	2256.5	2253.6	2265.0	2270.8	2270.8	2270.8	2270.8	2267.9	2267.9	2270.8
20°	2222.1	2210.7	2216.4	2227.9	2230.7	2230.7	2233.6	2236.4	2236.4	2236.4
22.5°	2173.5	2167.8	2170.7	2179.2	2185.0	2187.8	2196.4	2196.4	2199.3	2202.1
25°	2116.3	2124.9	2127.8	2136.3	2139.2	2144.9	2156.4	2162.1	2162.1	2162.1
27.5°	2056.3	2073.4	2084.9	2090.6	2096.3	2102.0	2116.3	2127.8	2127.8	2127.8
30°	1999.1	2016.2	2039.1	2050.5	2056.3	2062.0	2082.0	2096.3	2099.2	2099.2
32.5°	1939.0	1961.9	1996.2	2013.4	2016.2	2024.8	2050.5	2067.7	2070.6	2070.6
35°	1887.5	1916.1	1953.3	1976.2	1981.9	1990.5	2019.1	2039.1	2042.0	2042.0
37.5°	1841.8	1870.4	1910.4	1941.9	1947.6	1959.0	1987.6	2013.4	2016.2	2019.1
40°	1790.3	1824.6	1864.7	1901.8	1913.3	1924.7	1956.2	1981.9	1987.6	1987.6
42.5°	1738.8	1781.7	1821.8	1864.7	1879.0	1890.4	1924.7	1950.4	1956.2	1956.2
45°	1684.5	1738.8	1778.9	1824.6	1841.8	1853.2	1884.7	1913.3	1921.9	1921.9
47.5°	1635.9	1693.1	1733.1	1778.9	1796.0	1813.2	1841.8	1870.4	1879.0	1881.8
50°	1581.5	1644.4	1684.5	1727.4	1750.3	1767.4	1796.0	1827.5	1836.1	1833.2
52.5°	1527.2	1587.2	1630.1	1675.9	1698.8	1715.9	1741.7	1776.0	1784.6	1784.6
55°	1470.0	1530.0	1575.8	1618.7	1641.6	1664.5	1690.2	1718.8	1730.2	1727.4
57.5°	1412.8	1467.1	1515.7	1561.5	1581.5	1604.4	1630.1	1658.7	1667.3	1673.0
60°	1352.7	1401.3	1455.7	1498.6	1518.6	1541.5	1567.2	1593.0	1607.3	1604.4
62.5°	1287.0	1341.3	1392.8	1432.8	1452.8	1475.7	1501.4	1524.3	1535.8	1541.5
65°	1221.2	1272.7	1321.3	1364.2	1381.3	1404.2	1432.8	1450.0	1464.3	1467.1
67.5°	1152.5	1204.0	1252.6	1298.4	1315.6	1335.6	1361.3	1378.5	1392.8	1395.6
70°	1083.9	1138.2	1186.9	1229.8	1246.9	1264.1	1289.8	1307.0	1321.3	1321.3
72.5°	1018.1	1072.5	1118.2	1161.1	1178.3	1192.6	1218.3	1235.5	1246.9	1249.8
75°	952.3	1003.8	1049.6	1092.5	1106.8	1123.9	1146.8	1164.0	1175.4	1178.3
77.5°	886.6	940.9	983.8	1023.8	1038.1	1052.4	1078.2	1092.5	1103.9	1103.9
80°	823.7	875.1	918.0	955.2	966.6	983.8	1006.7	1021.0	1029.6	1035.3
82.5°	763.6	812.2	852.2	886.6	903.7	915.2	938.0	952.3	960.9	966.6
85°	697.8	749.3	789.3	823.7	835.1	852.2	872.3	886.6	895.1	898.0
87.5°	637.8	683.5	723.6	763.6	777.9	789.3	809.4	823.7	832.2	837.9
90°	586.3	629.2	666.4	697.8	712.1	726.4	749.3	763.6	772.2	775.0
92.5°	549.1	592.0	626.3	657.8	672.1	683.5	703.5	717.8	726.4	729.3
95°	514.8	554.8	589.1	620.6	632.0	643.5	663.5	674.9	680.7	686.4
97.5°	477.6	520.5	552.0	580.6	594.9	603.4	623.5	634.9	643.5	646.3
100°	443.3	483.3	514.8	546.2	557.7	566.3	586.3	597.7	603.4	606.3
102.5°	409.0	449.0	480.5	509.1	520.5	529.1	546.2	557.7	566.3	569.1
105°	374.6	411.8	443.3	471.9	483.3	491.9	509.1	520.5	529.1	531.9
107.5°	343.2	377.5	409.0	434.7	446.1	454.7	471.9	483.3	491.9	494.8
110°	311.7	343.2	374.6	400.4	411.8	420.4	437.6	446.1	454.7	457.6



TEST NUMBER: P257119

CATALOG NUMBER: HGL-S-UF-40L940-UNV-12

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	277.4	311.7	340.3	366.1	374.6	386.1	400.4	411.8	417.5	420.4
115°	248.8	280.3	306.0	331.7	340.3	348.9	366.1	374.6	383.2	383.2
117.5°	217.4	246.0	274.6	297.4	306.0	314.6	331.7	340.3	346.0	348.9
120°	188.8	214.5	240.2	263.1	274.6	280.3	297.4	306.0	311.7	314.6
122.5°	160.2	185.9	211.6	231.7	240.2	248.8	263.1	271.7	277.4	280.3
125°	131.6	157.3	180.2	200.2	208.8	217.4	228.8	237.4	243.1	246.0
127.5°	105.8	128.7	151.6	168.7	177.3	185.9	197.3	205.9	211.6	214.5
130°	80.1	100.1	123.0	140.1	148.7	154.4	165.9	174.5	180.2	183.0
132.5°	54.3	74.4	94.4	111.5	120.1	125.8	137.3	143.0	148.7	151.6
135°	34.3	51.5	68.6	82.9	91.5	97.2	108.7	114.4	120.1	120.1
137.5°	17.2	31.5	45.8	57.2	62.9	71.5	80.1	85.8	88.7	91.5
140°	5.7	14.3	25.7	34.3	40.0	45.8	54.3	60.1	62.9	65.8
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)