

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: P256857

Luminaire Tested: **HGL-S-BA-53L830-UNV-4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P256857
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1803-682-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: HGL-S-BA-53L830-UNV-4
Description: HUGO 4 FOOT LINEAR LED LUMINAIRE WITH BAFFLE WITH AISLE OPTIC
Light Source: (168) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4906.0 lumens
Efficiency: N/A
Efficacy: 118.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.77 / 1.65
Luminous Opening: Rectangular w/ Sides (W: 0.23' x L: 4' x H: 0.01')
CIE Type: Direct

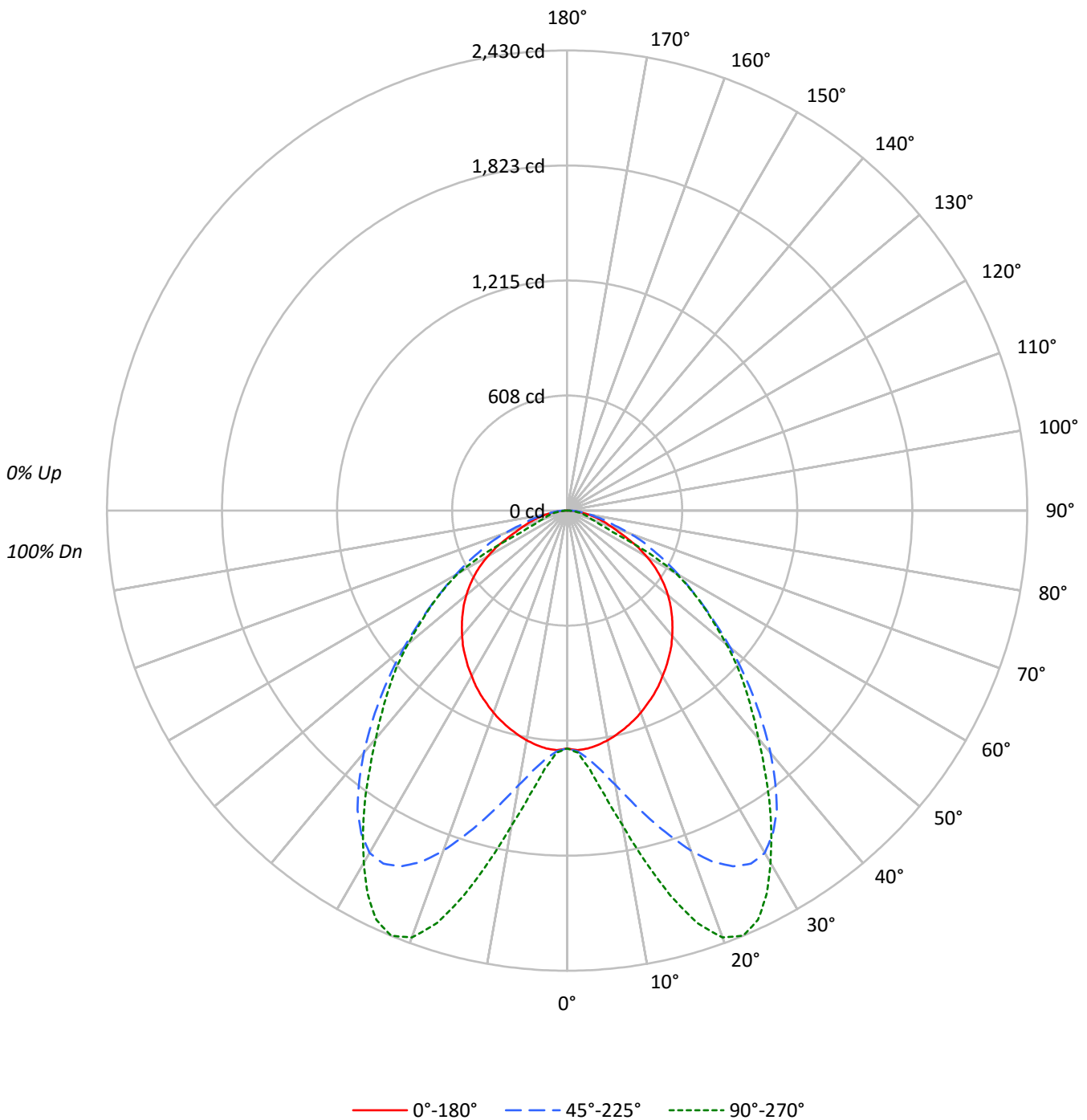
Input Watts (W): 41.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	110	106	102	98	107	103	100	97	99	96	94		95	93	91		92	90	88	86
2	101	93	87	82	98	91	86	81	88	83	79		85	81	77		82	78	75	73
3	92	82	75	69	90	81	74	68	78	72	67		75	70	66		73	68	65	63
4	85	73	65	59	83	72	64	58	70	63	58		67	62	57		65	60	56	54
5	78	66	57	51	76	65	57	51	63	55	50		61	54	50		59	53	49	47
6	72	59	51	44	70	58	50	44	57	49	44		55	48	44		53	48	43	41
7	67	54	45	39	65	53	45	39	51	44	39		50	43	39		49	43	38	36
8	62	49	41	35	61	48	40	35	47	40	35		46	39	34		45	39	34	32
9	58	45	37	31	57	44	37	31	43	36	31		42	36	31		41	35	31	29
10	54	41	34	28	53	41	33	28	40	33	28		39	32	28		38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14748	14748	14748
5°	14862	15471	16105
10°	14679	17448	19982
15°	14431	20305	25260
20°	14189	23598	29508
25°	13927	26452	30282
30°	13649	27772	28398
35°	13434	27051	25865
40°	13201	24927	23244
45°	12955	22387	21211
50°	12655	19760	19067
55°	12183	17233	16853
60°	11350	15129	14524
65°	9830	13106	6494
70°	8453	11047	4488
75°	7736	8570	4058
80°	6934	6962	3551
85°	5724	6045	2427



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.2	2.7
10°-20°	474.9	9.7
20°-30°	859.6	17.5
30°-40°	1031.6	21.0
40°-50°	977.2	19.9
50°-60°	765.7	15.6
60°-70°	427.3	8.7
70°-80°	181.1	3.7
80°-90°	56.3	1.1
90°-100°	2.0	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°	1464.7	29.9
0°-40°	2496.2	50.9
0°-60°	4239.2	86.4
0°-90°	4903.9	100.0
90°-120°	2.0	0.0
90°-150°	2.0	0.0
90°-180°	2.0	0.0
0°-180°	4906.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1256	1256	1256	1256	1256	
5°	1261	1266	1316	1360	1372	119
15°	1188	1330	1685	1994	2102	335
25°	1076	1414	2073	2326	2385	496
35°	939	1446	1930	1849	1860	587
45°	782	1324	1392	1294	1333	603
55°	597	962	881	853	874	532
65°	356	444	505	406	256	356
75°	172	178	212	150	104	183
85°	44	50	62	48	27	49
90°	0	10	19	13	0	3
95°	0	0	0	0	0	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1256.0	1256.0	1256.0	1256.0	1256.0	1256.0	1256.0	1256.0	1256.0	1256.0	1256.0
2.5°	1266.2	1264.9	1261.1	1256.0	1257.2	1258.5	1258.5	1259.8	1261.1	1264.9	1272.6
5°	1261.1	1258.5	1257.2	1256.0	1262.4	1266.2	1270.1	1277.8	1286.8	1300.9	1316.3
7.5°	1248.2	1248.2	1250.8	1256.0	1270.1	1279.1	1286.8	1306.0	1327.9	1354.8	1384.4
10°	1231.6	1234.1	1241.8	1253.4	1279.1	1293.2	1308.6	1340.7	1377.9	1422.9	1471.7
12.5°	1211.0	1216.1	1229.0	1250.8	1289.3	1311.2	1334.3	1383.1	1438.3	1502.5	1574.4
15°	1187.9	1194.3	1214.9	1247.0	1299.6	1330.4	1362.5	1429.3	1505.1	1591.1	1684.9
17.5°	1163.5	1172.5	1200.7	1245.7	1313.7	1352.3	1393.4	1480.7	1578.3	1682.3	1797.9
20°	1136.5	1149.4	1185.3	1243.1	1326.6	1374.1	1424.2	1533.3	1652.8	1776.1	1910.9
22.5°	1105.7	1122.4	1167.3	1238.0	1339.4	1395.9	1455.0	1582.1	1720.8	1860.8	2007.2
25°	1076.2	1094.1	1146.8	1231.6	1349.7	1413.9	1482.0	1627.1	1782.5	1930.2	2072.7
27.5°	1044.1	1064.6	1127.5	1225.1	1357.4	1429.3	1505.1	1664.3	1827.4	1973.8	2102.2
30°	1008.1	1035.1	1105.7	1214.9	1361.3	1440.9	1523.1	1693.9	1855.7	1984.1	2086.8
32.5°	974.7	1004.2	1081.3	1203.3	1362.5	1447.3	1534.6	1702.9	1855.7	1961.0	2022.6
35°	938.8	970.9	1056.9	1189.2	1357.4	1446.0	1533.3	1700.3	1828.7	1900.6	1930.2
37.5°	902.8	937.5	1031.2	1169.9	1345.8	1437.0	1524.3	1674.6	1773.5	1812.0	1804.3
40°	863.0	901.5	997.8	1145.5	1325.3	1413.9	1497.4	1629.7	1692.6	1699.0	1670.7
42.5°	823.2	863.0	964.4	1113.4	1290.6	1375.4	1452.4	1557.7	1587.3	1573.1	1529.5
45°	782.1	823.2	924.6	1074.9	1247.0	1324.0	1388.2	1464.0	1464.0	1438.3	1392.1
47.5°	739.7	779.5	882.2	1029.9	1190.5	1257.2	1309.9	1354.8	1334.3	1302.2	1256.0
50°	694.8	734.6	834.7	976.0	1117.3	1172.5	1216.1	1232.8	1200.7	1164.8	1123.7
52.5°	647.2	687.0	778.2	907.9	1031.2	1072.3	1104.4	1103.1	1064.6	1032.5	996.5
55°	597.2	633.1	715.3	827.0	928.5	961.9	981.1	965.7	929.8	900.2	881.0
57.5°	544.5	574.0	644.7	735.8	811.6	837.3	848.9	828.3	802.6	784.6	774.4
60°	485.4	509.8	559.9	630.5	685.8	703.7	711.4	697.3	688.3	683.2	680.6
62.5°	423.8	435.3	467.4	513.7	559.9	572.8	581.7	584.3	583.0	585.6	592.0
65°	355.7	359.6	369.9	393.0	428.9	444.3	461.0	479.0	489.3	499.6	504.7
67.5°	292.8	294.1	299.2	306.9	321.1	337.7	351.9	378.8	402.0	421.2	434.1
70°	247.9	246.6	247.9	251.7	259.4	265.8	272.3	291.5	315.9	348.0	350.6
72.5°	209.3	208.0	209.3	211.9	214.5	217.0	220.9	228.6	242.7	262.0	265.8
75°	172.1	172.1	172.1	174.7	177.2	178.5	181.1	183.6	188.8	202.9	211.9
77.5°	137.4	136.1	138.7	140.0	141.3	143.8	145.1	147.7	150.3	155.4	161.8
80°	104.0	102.7	104.0	106.6	107.9	110.4	110.4	114.3	115.6	119.4	122.0
82.5°	73.2	71.9	73.2	75.8	75.8	78.3	79.6	82.2	84.8	87.3	89.9
85°	43.7	43.7	44.9	46.2	47.5	50.1	51.4	55.2	57.8	60.4	61.6
87.5°	19.3	19.3	20.5	21.8	24.4	27.0	28.3	30.8	33.4	37.2	37.2
90°	0.0	1.3	3.9	6.4	7.7	10.3	10.3	14.1	15.4	18.0	19.3
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	2.6	3.9	5.1
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	1256.0	1256.0	1256.0	1256.0	1256.0	1256.0	1256.0	1256.0	1256.0	1256.0
2.5°	1284.2	1276.5	1281.6	1282.9	1284.2	1281.6	1279.1	1281.6	1279.1	1279.1
5°	1335.6	1334.3	1347.1	1356.1	1360.0	1360.0	1367.7	1372.8	1374.1	1371.5
7.5°	1416.5	1424.2	1449.9	1467.8	1478.1	1483.3	1497.4	1505.1	1515.4	1514.1
10°	1523.1	1547.5	1586.0	1611.7	1629.7	1638.6	1659.2	1673.3	1690.0	1688.7
12.5°	1639.9	1684.9	1738.8	1779.9	1806.9	1823.6	1850.5	1876.2	1891.6	1892.9
15°	1772.2	1833.8	1907.0	1959.7	1994.4	2016.2	2053.4	2079.1	2104.8	2102.2
17.5°	1901.9	1976.4	2065.0	2134.3	2166.4	2187.0	2231.9	2258.9	2283.3	2283.3
20°	2017.5	2103.5	2193.4	2257.6	2288.4	2309.0	2347.5	2374.5	2392.5	2398.9
22.5°	2109.9	2189.6	2265.3	2320.6	2339.8	2356.5	2386.0	2407.9	2419.4	2429.7
25°	2161.3	2225.5	2276.9	2315.4	2325.7	2334.7	2351.4	2368.1	2370.6	2384.8
27.5°	2162.6	2210.1	2238.4	2252.5	2253.8	2253.8	2265.3	2271.8	2276.9	2282.0
30°	2116.4	2138.2	2143.3	2144.6	2138.2	2134.3	2142.0	2143.3	2147.2	2147.2
32.5°	2023.9	2029.0	2020.1	2005.9	2002.1	1994.4	1999.5	1996.9	2003.4	2007.2
35°	1905.8	1896.8	1873.7	1863.4	1849.3	1845.4	1849.3	1846.7	1850.5	1859.5
37.5°	1770.9	1751.7	1732.4	1714.4	1704.1	1693.9	1697.7	1701.6	1706.7	1709.3
40°	1632.2	1606.5	1586.0	1568.0	1557.7	1550.0	1556.5	1560.3	1571.9	1571.9
42.5°	1492.2	1464.0	1443.4	1431.9	1424.2	1417.8	1428.0	1430.6	1444.7	1447.3
45°	1353.5	1329.1	1312.5	1300.9	1294.5	1297.0	1307.3	1313.7	1326.6	1333.0
47.5°	1226.4	1205.9	1187.9	1182.8	1182.8	1185.3	1195.6	1202.0	1212.3	1220.0
50°	1101.8	1086.4	1074.9	1068.5	1069.7	1073.6	1082.6	1087.7	1098.0	1098.0
52.5°	979.8	969.6	964.4	956.7	956.7	955.4	964.4	969.6	977.3	978.6
55°	873.3	864.3	859.1	854.0	852.7	855.3	860.4	864.3	873.3	874.5
57.5°	771.8	768.0	764.1	760.2	759.0	760.2	762.8	765.4	770.5	771.8
60°	679.3	678.1	672.9	669.1	667.8	666.5	665.2	663.9	666.5	665.2
62.5°	594.6	590.7	586.9	579.2	575.3	565.0	552.2	524.0	500.8	488.0
65°	511.1	508.5	490.6	437.9	405.8	364.7	321.1	278.7	264.5	255.6
67.5°	430.2	387.8	323.6	277.4	260.7	245.3	222.2	199.1	186.2	178.5
70°	309.5	273.5	244.0	218.3	206.8	197.8	179.8	163.1	151.5	146.4
72.5°	250.4	227.3	208.0	188.8	179.8	169.5	151.5	134.8	124.6	119.4
75°	209.3	195.2	175.9	158.0	150.3	142.5	129.7	116.9	107.9	104.0
77.5°	165.7	158.0	146.4	132.3	125.9	120.7	109.2	100.2	91.2	87.3
80°	122.0	119.4	111.7	101.5	96.3	92.5	83.5	75.8	68.1	65.5
82.5°	89.9	87.3	80.9	73.2	70.6	66.8	60.4	53.9	48.8	46.2
85°	61.6	60.4	55.2	50.1	47.5	44.9	38.5	33.4	29.5	27.0
87.5°	38.5	37.2	34.7	29.5	27.0	24.4	19.3	15.4	11.6	10.3
90°	19.3	19.3	18.0	14.1	12.8	11.6	7.7	3.9	1.3	0.0
92.5°	5.1	5.1	5.1	3.9	3.9	2.6	1.3	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P256857

CATALOG NUMBER: HGL-S-BA-53L830-UNV-4

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	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
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)