

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: LUMARK

Report Number: P143677

Luminaire Tested: **LDRL-5MQ-F06-E-7060**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P143677  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33697)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: LDRL-5MQ-F06-E-7060  
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE  
(6) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM  
Light Source: (42) 5700K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15794.6 lumens  
Efficiency: N/A  
Efficacy: 100.9 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B4 - U0 - G2

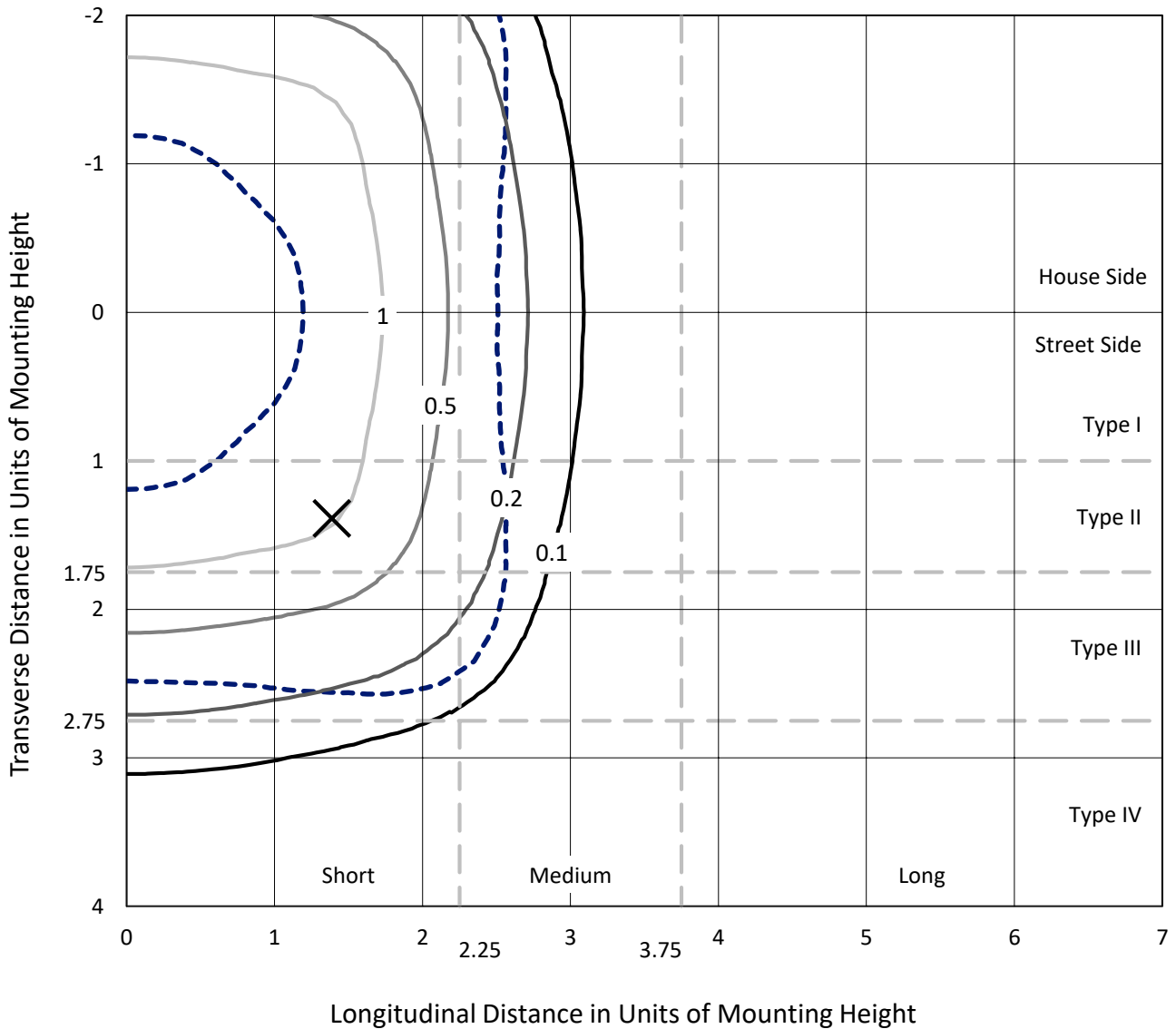
Input Watts (W): 156.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

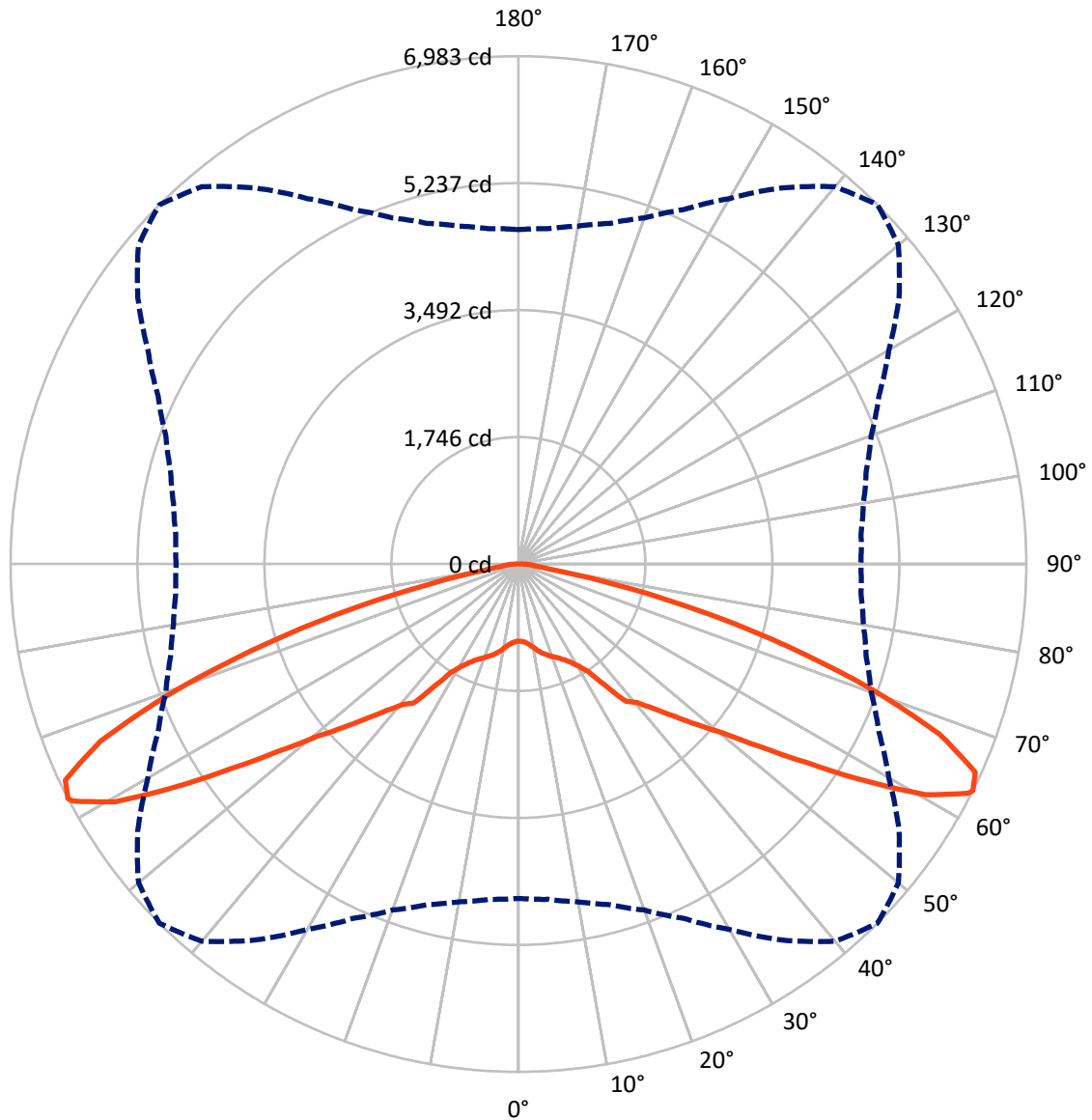
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 63-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7897.3	0.0	7897.3
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	7897.3	0.0	7897.3
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	15794.6	0.0	15794.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.7	0.7
10°-20°	364.6	2.3
20°-30°	696.5	4.4
30°-40°	1326.8	8.4
40°-50°	2284.8	14.5
50°-60°	4082.9	25.8
60°-70°	4973.0	31.5
70°-80°	1771.4	11.2
80°-90°	187.8	1.2
90°-100°	0.0	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°-90°	15794.6	100.0
0°-180°	15794.6	100.0



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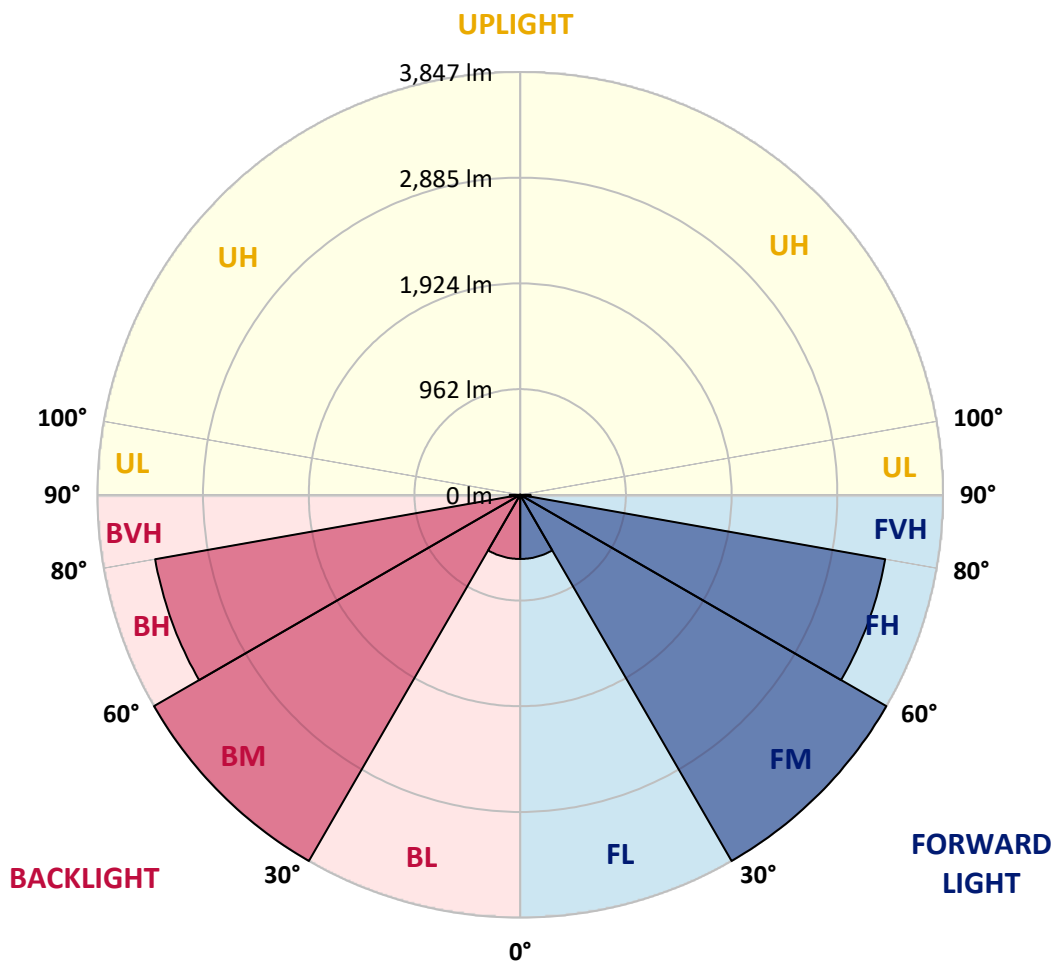
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	583.9	3.7			
FM (30°-60°)	3847.2	24.4			
FH (60°-80°)	3372.2	21.4			G2/5000
FVH (80°-90°)	93.9	0.6			G1/100
BL (0°-30°)	583.9	3.7	B2/1000		
BM (30°-60°)	3847.2	24.4	B3/5000		
BH (60°-80°)	3372.2	21.4	B4/5000		G2/5000
BVH (80°-90°)	93.9	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G2**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1060.2	1060.2	1060.2	1060.2	1060.2	1060.2	1060.2	1060.2	1060.2	1060.2	1060.2
2.5°	1068.3	1067.3	1068.3	1066.3	1066.3	1065.3	1065.3	1065.3	1063.2	1065.3	1063.2
5°	1090.7	1089.7	1090.7	1088.7	1088.7	1086.6	1086.6	1086.6	1084.6	1086.6	1085.6
7.5°	1129.3	1131.4	1129.3	1127.3	1127.3	1125.3	1124.2	1124.2	1123.2	1122.2	1124.2
10°	1183.2	1185.2	1182.2	1180.1	1179.1	1178.1	1176.1	1175.1	1175.1	1171.0	1172.0
12.5°	1240.1	1240.1	1237.1	1236.1	1236.1	1234.0	1230.0	1228.9	1228.9	1226.9	1224.9
15°	1290.9	1290.9	1288.9	1284.8	1285.9	1282.8	1279.8	1277.7	1277.7	1275.7	1273.7
17.5°	1337.7	1337.7	1334.7	1330.6	1328.6	1327.5	1323.5	1321.4	1321.4	1319.4	1317.4
20°	1384.5	1386.5	1381.4	1377.3	1373.3	1369.2	1365.1	1363.1	1360.1	1361.1	1360.1
22.5°	1440.4	1441.4	1433.3	1428.2	1420.0	1415.0	1408.9	1406.8	1402.8	1402.8	1404.8
25°	1511.5	1510.5	1501.4	1492.2	1483.1	1472.9	1463.7	1461.7	1457.6	1456.6	1457.6
27.5°	1605.0	1604.0	1592.8	1580.6	1568.4	1553.2	1542.0	1535.9	1532.9	1528.8	1530.8
30°	1719.9	1721.9	1708.7	1694.5	1679.2	1660.9	1646.7	1638.6	1632.5	1628.4	1630.5
32.5°	1953.7	1951.7	1931.3	1900.8	1868.3	1825.6	1791.1	1776.8	1765.6	1761.6	1764.6
35°	2188.5	2186.5	2178.3	2169.2	2161.1	2133.6	2108.2	2078.7	2054.3	2039.1	2043.1
37.5°	2299.3	2299.3	2293.2	2291.2	2291.2	2307.4	2327.8	2364.4	2392.8	2394.9	2385.7
40°	2472.1	2472.1	2461.9	2456.9	2453.8	2458.9	2472.1	2485.3	2499.6	2502.6	2492.4
42.5°	2675.4	2666.3	2659.1	2649.0	2648.0	2653.0	2667.3	2683.5	2697.8	2710.0	2688.6
45°	2895.0	2886.8	2879.7	2873.6	2877.7	2890.9	2910.2	2938.7	2959.0	2977.3	2960.0
47.5°	3139.9	3122.7	3129.8	3123.7	3133.8	3160.3	3194.8	3237.5	3258.9	3291.4	3264.0
50°	3444.9	3449.0	3444.9	3444.9	3457.1	3491.6	3542.5	3600.4	3637.0	3655.3	3639.0
52.5°	3898.2	3886.0	3858.6	3866.7	3883.0	3937.9	4004.0	4085.3	4132.0	4175.7	4124.9
55°	4394.3	4396.3	4392.3	4403.4	4434.9	4490.9	4574.2	4697.2	4756.2	4832.4	4771.4
57.5°	4805.0	4819.2	4843.6	4877.1	4945.2	5038.7	5202.4	5390.5	5547.0	5629.3	5533.8
60°	4938.1	4952.3	5011.3	5104.8	5232.9	5424.0	5689.3	6011.5	6293.1	6439.5	6314.4
62.5°	4682.0	4708.4	4795.8	4924.9	5136.3	5435.2	5829.6	6306.3	6740.4	6940.6	6789.1
63°	4598.6	4628.1	4717.5	4848.7	5064.2	5376.2	5802.1	6312.4	6771.9	6983.3	6819.6
65°	4228.6	4247.9	4342.4	4491.9	4731.8	5057.0	5530.7	6134.5	6658.0	6903.0	6729.2
67.5°	3646.2	3671.6	3758.0	3887.1	4119.8	4464.4	4930.0	5531.7	6047.1	6243.3	6094.9
70°	2924.4	2952.9	3024.1	3144.0	3327.0	3646.2	4044.6	4606.7	4994.0	5147.5	4988.9
72.5°	2055.3	2067.5	2119.4	2245.4	2382.7	2636.8	2952.9	3390.0	3762.0	3862.7	3710.2
75°	870.1	871.1	939.2	1019.5	1191.3	1444.4	1719.9	2096.0	2430.4	2587.0	2393.8
77.5°	278.5	281.6	300.9	330.4	387.3	500.1	703.4	909.8	1216.7	1365.1	1184.2
80°	232.8	236.8	245.0	251.1	255.1	261.2	284.6	317.1	399.5	464.5	375.1
82.5°	200.2	207.4	225.7	232.8	236.8	238.9	241.9	240.9	235.8	233.8	234.8
85°	152.5	169.8	190.1	206.3	208.4	209.4	215.5	217.5	201.3	185.0	201.3
87.5°	66.1	85.4	131.1	145.4	142.3	132.1	141.3	149.4	136.2	99.6	133.2
90°	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):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1060.2	1060.2	1060.2	1060.2	1060.2	1060.2	1060.2	1060.2
2.5°	1064.3	1066.3	1066.3	1066.3	1066.3	1067.3	1068.3	1067.3
5°	1086.6	1088.7	1087.6	1088.7	1088.7	1089.7	1090.7	1089.7
7.5°	1125.3	1125.3	1125.3	1127.3	1127.3	1129.3	1129.3	1129.3
10°	1173.0	1172.0	1172.0	1174.0	1176.1	1177.1	1179.1	1178.1
12.5°	1224.9	1222.8	1223.9	1225.9	1227.9	1228.9	1231.0	1230.0
15°	1271.6	1270.6	1270.6	1273.7	1274.7	1275.7	1279.8	1279.8
17.5°	1316.4	1316.4	1316.4	1320.4	1321.4	1325.5	1328.6	1328.6
20°	1361.1	1361.1	1361.1	1365.1	1368.2	1374.3	1380.4	1379.4
22.5°	1406.8	1407.8	1409.9	1413.9	1421.1	1430.2	1435.3	1435.3
25°	1463.7	1467.8	1471.9	1478.0	1488.1	1500.3	1508.5	1511.5
27.5°	1536.9	1546.1	1556.2	1565.4	1576.6	1591.8	1603.0	1605.0
30°	1636.6	1649.8	1666.0	1678.2	1692.5	1709.7	1723.0	1730.1
32.5°	1777.8	1810.4	1831.7	1875.4	1901.9	1931.3	1955.7	1965.9
35°	2068.6	2101.1	2129.5	2159.0	2165.1	2175.3	2188.5	2191.6
37.5°	2356.2	2329.8	2304.4	2303.4	2296.3	2298.3	2302.4	2307.4
40°	2481.3	2473.1	2459.9	2465.0	2466.0	2466.0	2474.1	2475.2
42.5°	2682.5	2663.2	2648.0	2660.2	2662.2	2664.2	2672.4	2681.5
45°	2938.7	2909.2	2889.9	2882.8	2889.9	2887.9	2899.0	2901.1
47.5°	3231.4	3192.8	3149.1	3134.9	3130.8	3121.6	3141.0	3138.9
50°	3590.2	3528.2	3475.4	3455.1	3444.9	3439.8	3444.9	3444.9
52.5°	4044.6	3982.6	3910.4	3887.1	3878.9	3890.1	3873.8	3891.1
55°	4669.8	4569.1	4470.5	4439.0	4433.9	4428.9	4430.9	4438.0
57.5°	5373.2	5194.3	5062.1	4984.9	4935.1	4910.7	4884.2	4880.2
60°	6052.2	5726.9	5475.8	5305.1	5184.1	5092.6	5045.9	5029.6
62.5°	6379.5	5903.8	5513.4	5222.7	5042.8	4893.4	4811.1	4789.7
63°	6388.6	5881.4	5467.7	5160.7	4951.3	4817.1	4729.7	4707.4
65°	6218.9	5641.5	5156.7	4819.2	4597.6	4457.3	4349.6	4326.2
67.5°	5600.9	5040.8	4544.7	4202.2	3962.3	3849.5	3730.5	3727.5
70°	4596.6	4096.5	3678.7	3363.6	3163.3	3051.5	2930.5	2933.6
72.5°	3360.5	2916.3	2628.6	2382.7	2171.2	2065.5	1951.7	1962.8
75°	2022.8	1626.4	1367.2	1153.7	936.2	806.1	718.7	668.9
77.5°	865.0	591.6	424.9	337.5	284.6	263.3	253.1	250.1
80°	300.9	266.3	251.1	247.0	244.0	239.9	232.8	225.7
82.5°	244.0	244.0	235.8	234.8	225.7	218.5	200.2	191.1
85°	216.5	212.4	205.3	202.3	200.2	185.0	161.6	149.4
87.5°	143.3	133.2	127.1	130.1	126.0	112.8	69.1	54.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)