

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: P143668

Luminaire Tested: **LDRL-5MQ-E06-E-8030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P143668  
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-E06-E-8030  
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE  
(6) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM  
Light Source: (126) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15737.1 lumens  
Efficiency: N/A  
Efficacy: 104.6 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

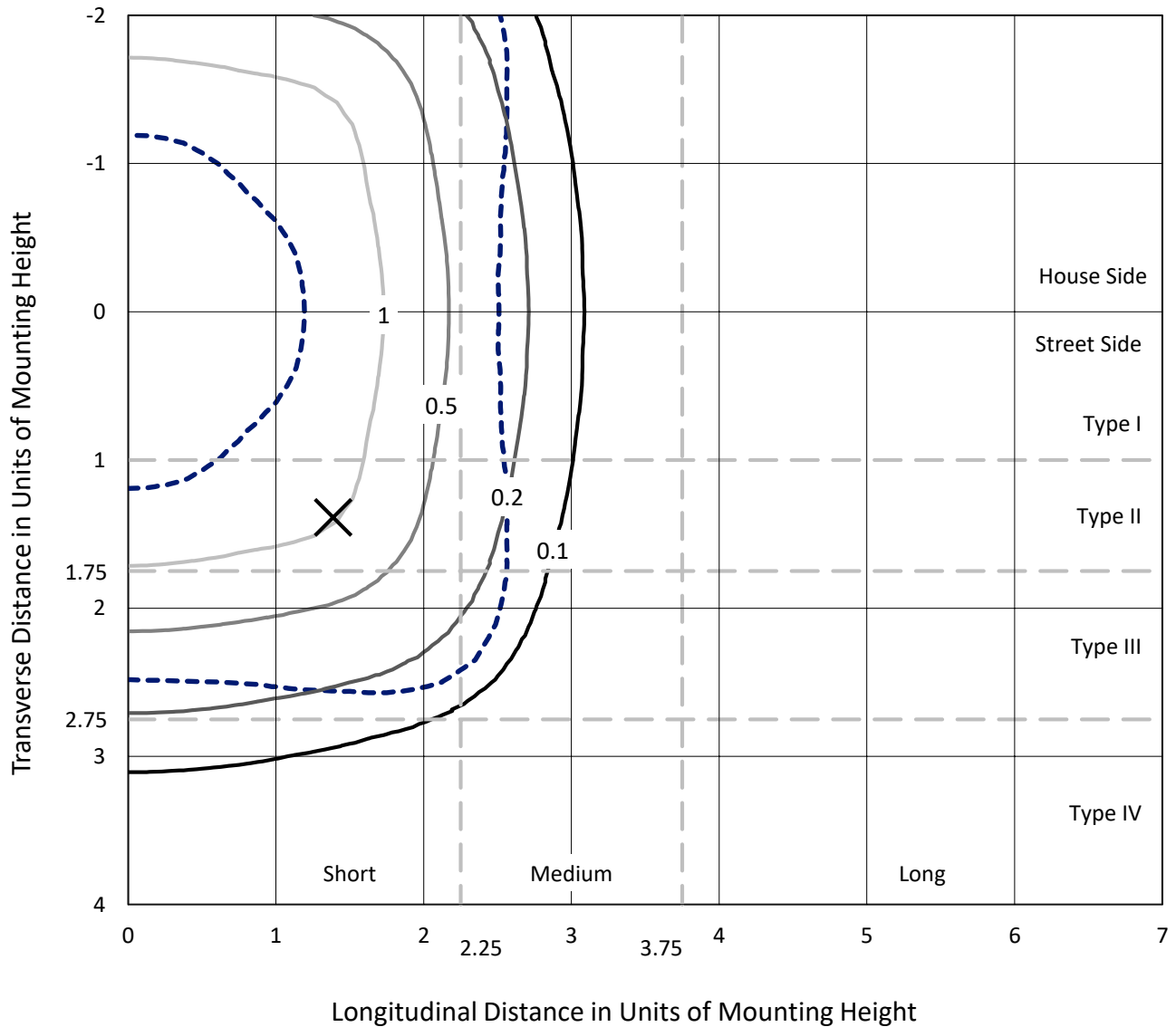
Input Watts (W): 150.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

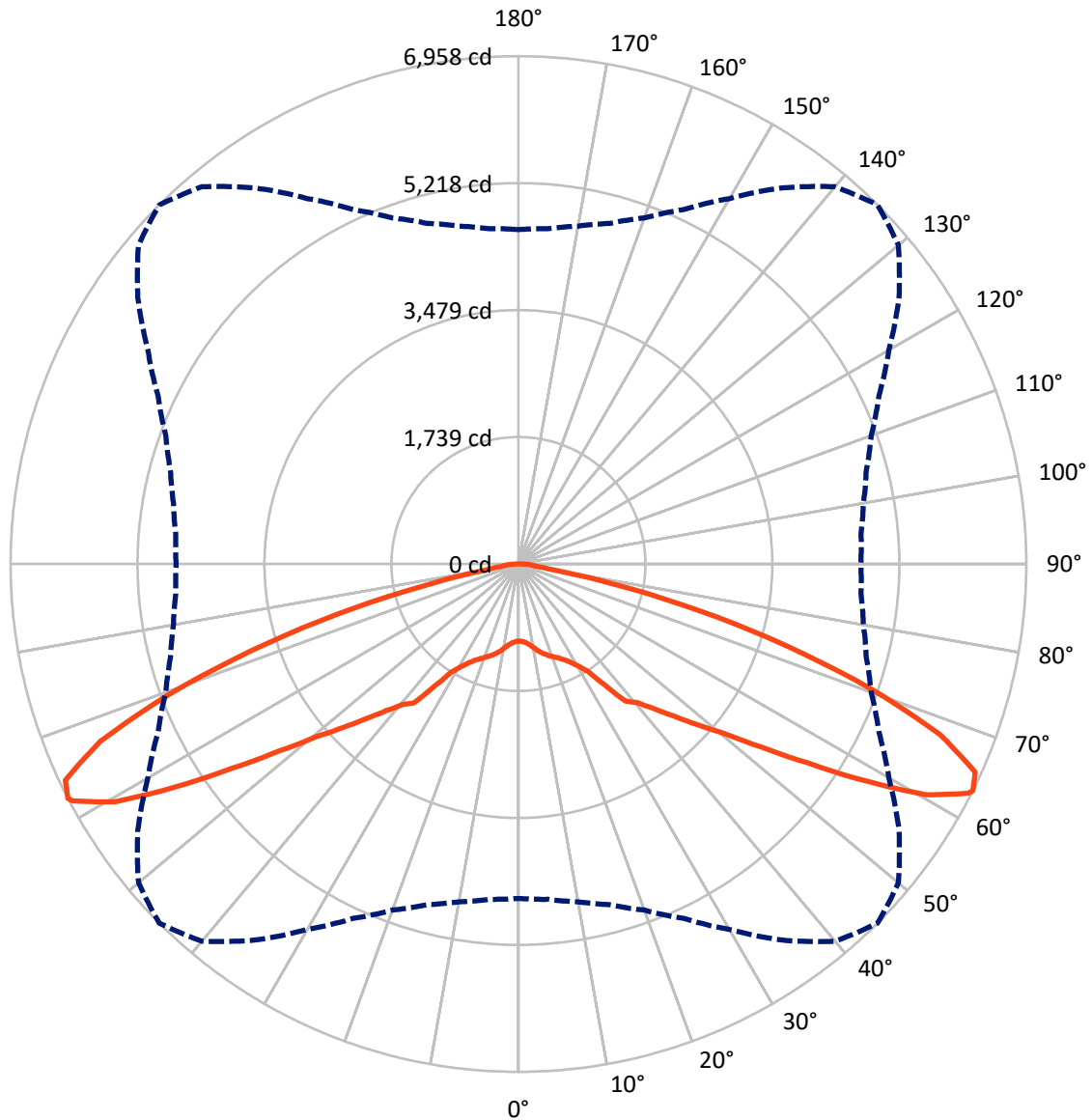


Based on 25 foot mounting height. Maximum calculated value = 1.9 fc  
 Type V - Short - Full Cutoff

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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	7868.5	0.0	7868.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	7868.5	0.0	7868.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	15737.1	0.0	15737.1
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.3	0.7
10°-20°	363.3	2.3
20°-30°	693.9	4.4
30°-40°	1322.0	8.4
40°-50°	2276.5	14.5
50°-60°	4068.0	25.8
60°-70°	4954.9	31.5
70°-80°	1765.0	11.2
80°-90°	187.1	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°	15737.1	100.0
0°-180°	15737.1	100.0



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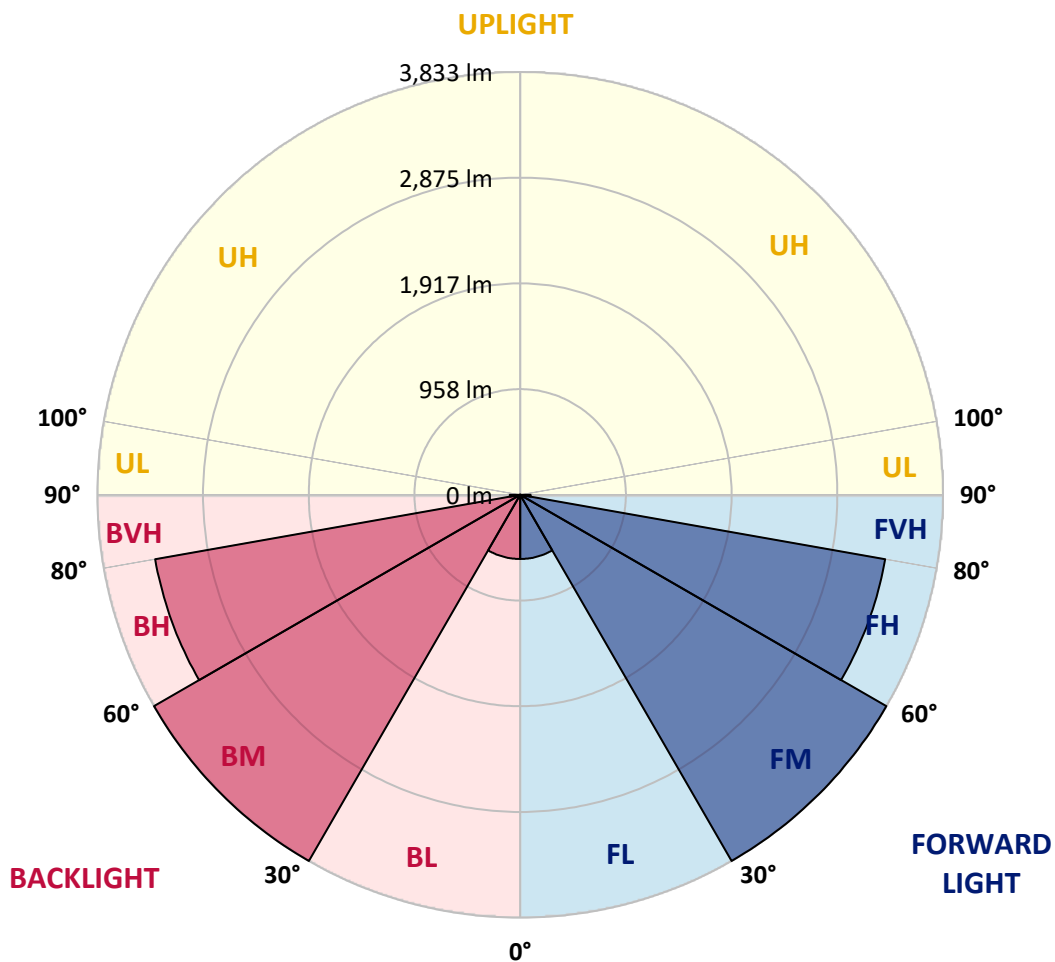
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	581.8	3.7			
FM	(30°-60°)	3833.2	24.4			
FH	(60°-80°)	3359.9	21.4			G2/5000
FVH	(80°-90°)	93.6	0.6			G1/100
BL	(0°-30°)	581.8	3.7	B2/1000		
BM	(30°-60°)	3833.2	24.4	B3/5000		
BH	(60°-80°)	3359.9	21.4	B4/5000		G2/5000
BVH	(80°-90°)	93.6	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°	1056.3	1056.3	1056.3	1056.3	1056.3	1056.3	1056.3	1056.3	1056.3	1056.3	1056.3
2.5°	1064.4	1063.4	1064.4	1062.4	1062.4	1061.4	1061.4	1061.4	1059.4	1061.4	1059.4
5°	1086.7	1085.7	1086.7	1084.7	1084.7	1082.7	1082.7	1082.7	1080.6	1082.7	1081.7
7.5°	1125.2	1127.2	1125.2	1123.2	1123.2	1121.2	1120.1	1120.1	1119.1	1118.1	1120.1
10°	1178.9	1180.9	1177.9	1175.8	1174.8	1173.8	1171.8	1170.8	1170.8	1166.7	1167.7
12.5°	1235.6	1235.6	1232.6	1231.6	1231.6	1229.5	1225.5	1224.5	1224.5	1222.4	1220.4
15°	1286.2	1286.2	1284.2	1280.2	1281.2	1278.1	1275.1	1273.1	1273.1	1271.1	1269.0
17.5°	1332.8	1332.8	1329.8	1325.7	1323.7	1322.7	1318.7	1316.6	1316.6	1314.6	1312.6
20°	1379.4	1381.4	1376.4	1372.3	1368.3	1364.2	1360.2	1358.2	1355.1	1356.1	1355.1
22.5°	1435.1	1436.1	1428.0	1423.0	1414.9	1409.8	1403.7	1401.7	1397.6	1397.6	1399.7
25°	1506.0	1505.0	1495.9	1486.8	1477.7	1467.5	1458.4	1456.4	1452.3	1451.3	1452.3
27.5°	1599.2	1598.2	1587.0	1574.9	1562.7	1547.5	1536.4	1530.3	1527.3	1523.2	1525.3
30°	1713.6	1715.7	1702.5	1688.3	1673.1	1654.9	1640.7	1632.6	1626.5	1622.5	1624.5
32.5°	1946.6	1944.6	1924.3	1893.9	1861.5	1819.0	1784.5	1770.4	1759.2	1755.2	1758.2
35°	2180.5	2178.5	2170.4	2161.3	2153.2	2125.8	2100.5	2071.2	2046.8	2031.7	2035.7
37.5°	2290.9	2290.9	2284.9	2282.8	2282.8	2299.0	2319.3	2355.7	2384.1	2386.1	2377.0
40°	2463.1	2463.1	2453.0	2447.9	2444.9	2449.9	2463.1	2476.3	2490.4	2493.5	2483.4
42.5°	2665.7	2656.5	2649.5	2639.3	2638.3	2643.4	2657.6	2673.8	2687.9	2700.1	2678.8
45°	2884.4	2876.3	2869.2	2863.2	2867.2	2880.4	2899.6	2928.0	2948.2	2966.5	2949.2
47.5°	3128.5	3111.3	3118.4	3112.3	3122.4	3148.8	3183.2	3225.7	3247.0	3279.4	3252.1
50°	3432.3	3436.4	3432.3	3432.3	3444.5	3478.9	3529.6	3587.3	3623.8	3642.0	3625.8
52.5°	3884.0	3871.9	3844.5	3852.6	3868.9	3923.5	3989.4	4070.4	4117.0	4160.5	4109.9
55°	4378.3	4380.3	4376.3	4387.4	4418.8	4474.5	4557.6	4680.1	4738.8	4814.8	4754.0
57.5°	4787.5	4801.6	4825.9	4859.4	4927.2	5020.4	5183.5	5370.8	5526.8	5608.8	5513.6
60°	4920.1	4934.3	4993.1	5086.2	5213.8	5404.2	5668.6	5989.6	6270.2	6416.0	6291.4
62.5°	4664.9	4691.2	4778.3	4907.0	5117.6	5415.4	5808.3	6283.3	6715.8	6915.3	6764.4
63°	4581.9	4611.2	4700.4	4831.0	5045.7	5356.6	5781.0	6289.4	6747.2	6957.9	6794.8
65°	4213.2	4232.4	4326.6	4475.5	4714.5	5038.6	5510.6	6112.2	6633.8	6877.9	6704.7
67.5°	3632.9	3658.2	3744.3	3872.9	4104.8	4448.2	4912.0	5511.6	6025.1	6220.6	6072.7
70°	2913.8	2942.2	3013.0	3132.6	3314.9	3632.9	4029.9	4590.0	4975.8	5128.8	4970.8
72.5°	2047.9	2060.0	2111.7	2237.3	2374.0	2627.2	2942.2	3377.7	3748.3	3848.6	3696.7
75°	866.9	868.0	935.8	1015.8	1187.0	1439.2	1713.6	2088.4	2421.6	2577.5	2385.1
77.5°	277.5	280.5	299.8	329.2	385.9	498.3	700.9	906.4	1212.3	1360.2	1179.9
80°	231.9	236.0	244.1	250.2	254.2	260.3	283.6	316.0	398.0	462.8	373.7
82.5°	199.5	206.6	224.8	231.9	236.0	238.0	241.0	240.0	235.0	232.9	234.0
85°	151.9	169.1	189.4	205.6	207.6	208.6	214.7	216.7	200.5	184.3	200.5
87.5°	65.8	85.1	130.6	144.8	141.8	131.7	140.8	148.9	135.7	99.3	132.7
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°	1056.3	1056.3	1056.3	1056.3	1056.3	1056.3	1056.3	1056.3
2.5°	1060.4	1062.4	1062.4	1062.4	1062.4	1063.4	1064.4	1063.4
5°	1082.7	1084.7	1083.7	1084.7	1084.7	1085.7	1086.7	1085.7
7.5°	1121.2	1121.2	1121.2	1123.2	1123.2	1125.2	1125.2	1125.2
10°	1168.8	1167.7	1167.7	1169.8	1171.8	1172.8	1174.8	1173.8
12.5°	1220.4	1218.4	1219.4	1221.4	1223.4	1224.5	1226.5	1225.5
15°	1267.0	1266.0	1266.0	1269.0	1270.0	1271.1	1275.1	1275.1
17.5°	1311.6	1311.6	1311.6	1315.6	1316.6	1320.7	1323.7	1323.7
20°	1356.1	1356.1	1356.1	1360.2	1363.2	1369.3	1375.4	1374.4
22.5°	1401.7	1402.7	1404.7	1408.8	1415.9	1425.0	1430.1	1430.1
25°	1458.4	1462.5	1466.5	1472.6	1482.7	1494.9	1503.0	1506.0
27.5°	1531.3	1540.5	1550.6	1559.7	1570.8	1586.0	1597.2	1599.2
30°	1630.6	1643.8	1660.0	1672.1	1686.3	1703.5	1716.7	1723.8
32.5°	1771.4	1803.8	1825.0	1868.6	1894.9	1924.3	1948.6	1958.7
35°	2061.0	2093.4	2121.8	2151.2	2157.2	2167.4	2180.5	2183.6
37.5°	2347.6	2321.3	2296.0	2295.0	2287.9	2289.9	2294.0	2299.0
40°	2472.2	2464.1	2450.9	2456.0	2457.0	2457.0	2465.1	2466.1
42.5°	2672.8	2653.5	2638.3	2650.5	2652.5	2654.5	2662.6	2671.7
45°	2928.0	2898.6	2879.4	2872.3	2879.4	2877.3	2888.5	2890.5
47.5°	3219.7	3181.2	3137.6	3123.4	3119.4	3110.3	3129.5	3127.5
50°	3577.2	3515.4	3462.7	3442.5	3432.3	3427.3	3432.3	3432.3
52.5°	4029.9	3968.1	3896.2	3872.9	3864.8	3875.9	3859.7	3877.0
55°	4652.8	4552.5	4454.2	4422.9	4417.8	4412.7	4414.7	4421.8
57.5°	5353.6	5175.4	5043.7	4966.7	4917.1	4892.8	4866.5	4862.4
60°	6030.1	5706.1	5455.9	5285.7	5165.2	5074.1	5027.5	5011.3
62.5°	6356.3	5882.3	5493.4	5203.7	5024.4	4875.6	4793.5	4772.3
63°	6365.4	5860.0	5447.8	5141.9	4933.3	4799.6	4712.5	4690.2
65°	6196.2	5621.0	5137.9	4801.6	4580.8	4441.1	4333.7	4310.4
67.5°	5580.5	5022.4	4528.2	4186.9	3947.9	3835.4	3716.9	3713.9
70°	4579.8	4081.5	3665.3	3351.3	3151.8	3040.4	2919.9	2922.9
72.5°	3348.3	2905.7	2619.1	2374.0	2163.3	2058.0	1944.6	1955.7
75°	2015.5	1620.5	1362.2	1149.5	932.8	803.1	716.0	666.4
77.5°	861.9	589.4	423.3	336.2	283.6	262.3	252.2	249.1
80°	299.8	265.4	250.2	246.1	243.1	239.0	231.9	224.8
82.5°	243.1	243.1	235.0	234.0	224.8	217.7	199.5	190.4
85°	215.7	211.7	204.6	201.5	199.5	184.3	161.0	148.9
87.5°	142.8	132.7	126.6	129.6	125.6	112.4	68.9	54.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)