

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: P143973

Luminaire Tested: **LDRL-5WQ-F06-E-8030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P143973  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33698)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: LDRL-5WQ-F06-E-8030  
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE  
(6) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE  
Light Source: (42) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12815.3 lumens  
Efficiency: N/A  
Efficacy: 81.9 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short - Semi-Cutoff  
BUG Rating: B4 - U0 - G2

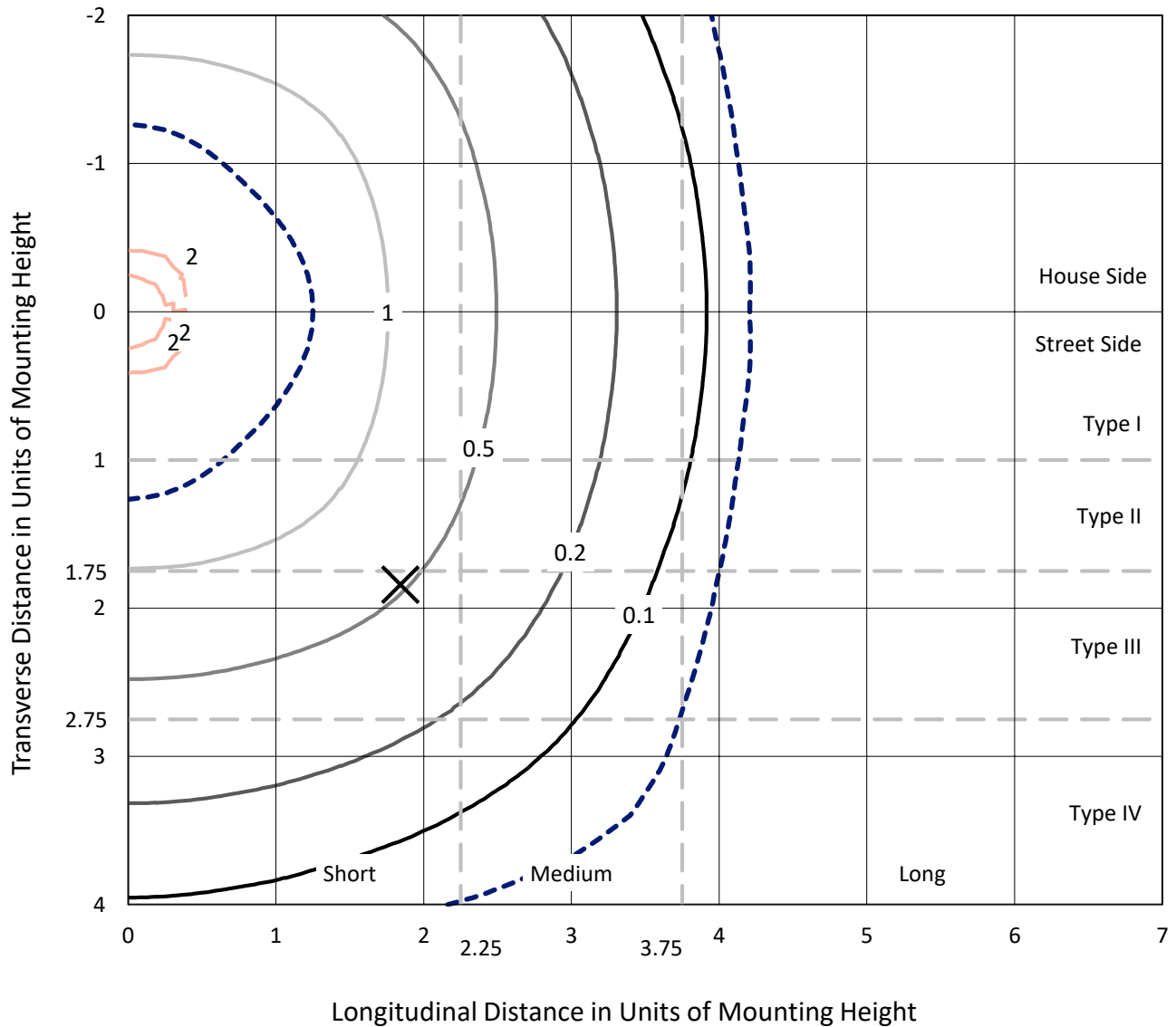
Input Watts (W): 156.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

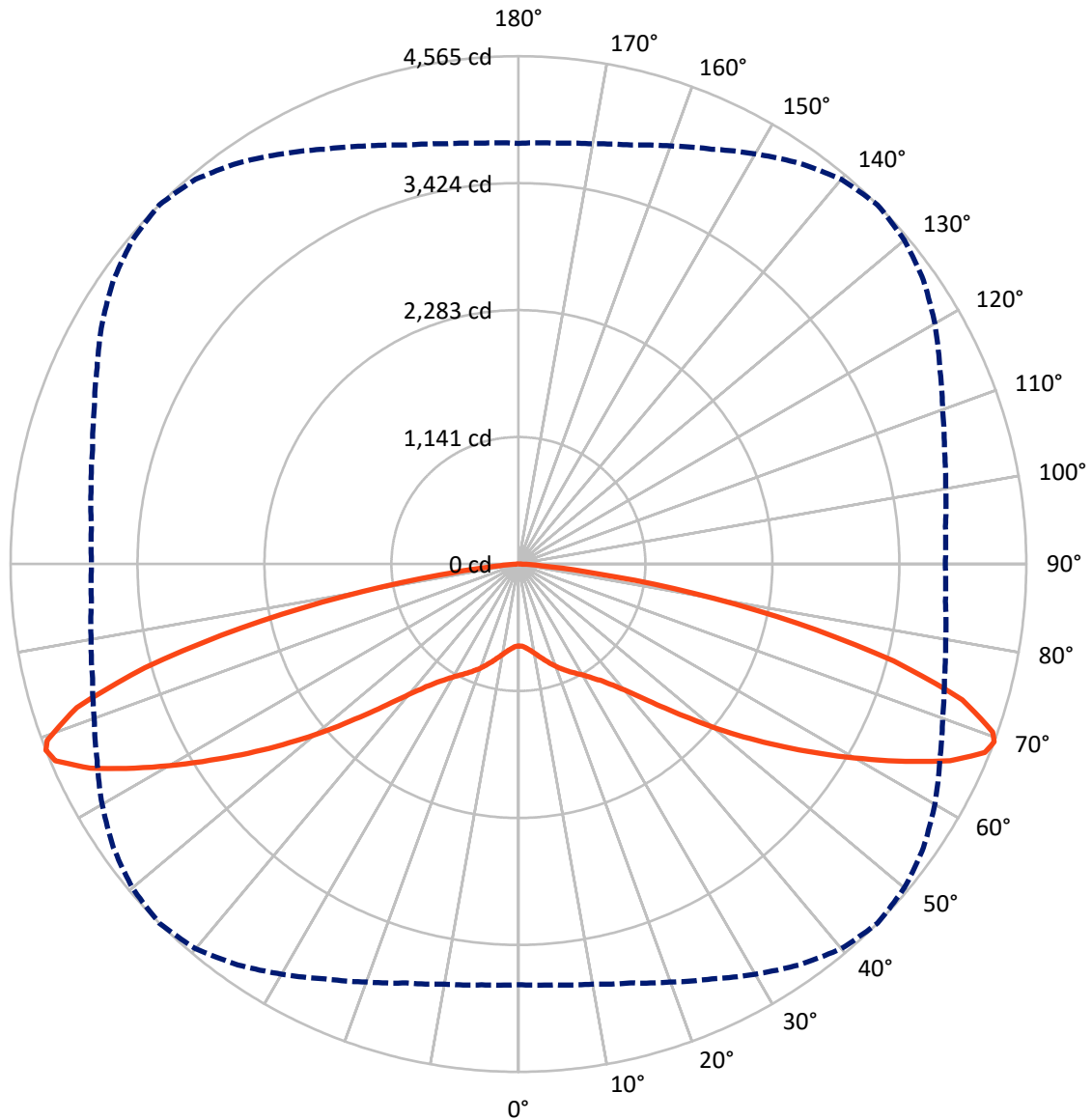
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 2 fc  
 Type V - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6407.7	0.0	6407.7
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	6407.7	0.0	6407.7
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	12815.3	0.0	12815.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.3	0.6
10°-20°	256.1	2.0
20°-30°	493.7	3.9
30°-40°	808.9	6.3
40°-50°	1406.6	11.0
50°-60°	2498.6	19.5
60°-70°	3879.2	30.3
70°-80°	3090.7	24.1
80°-90°	307.3	2.4
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°	12815.3	100.0
0°-180°	12815.3	100.0



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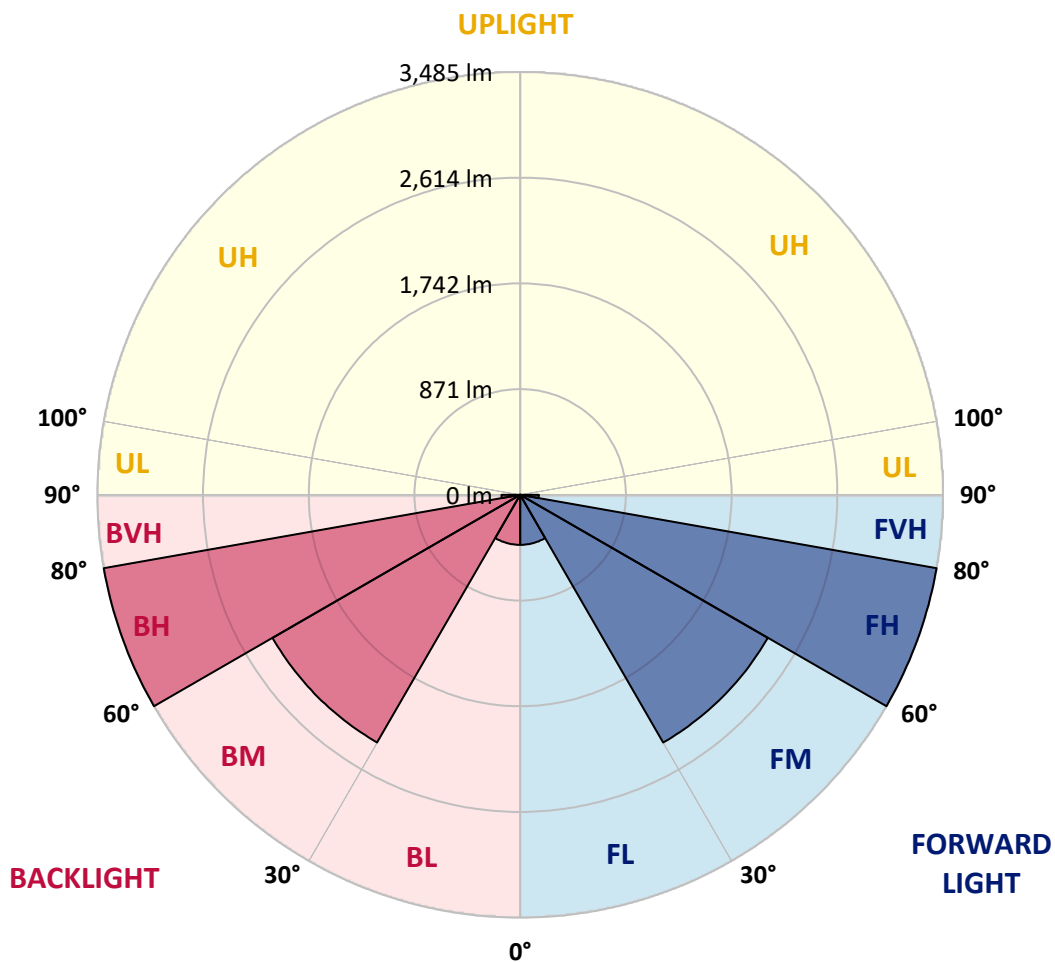
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	412.0	3.2			
FM	(30°-60°)	2357.0	18.4			
FH	(60°-80°)	3484.9	27.2			G2/5000
FVH	(80°-90°)	153.7	1.2			G2/225
BL	(0°-30°)	412.0	3.2	B1/500		
BM	(30°-60°)	2357.0	18.4	B2/2500		
BH	(60°-80°)	3484.9	27.2	B4/5000		G2/5000
BVH	(80°-90°)	153.7	1.2			G2/225
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°	736.6	736.6	736.6	736.6	736.6	736.6	736.6	736.6	736.6	736.6	736.6
2.5°	742.4	742.4	742.4	741.6	741.6	740.8	741.6	740.8	740.8	740.8	740.8
5°	761.7	760.0	760.0	759.2	760.8	760.8	759.2	760.0	759.2	760.0	760.0
7.5°	785.9	785.9	785.9	785.1	786.8	785.9	785.1	785.9	785.9	785.1	785.1
10°	816.0	816.9	816.0	816.0	818.5	817.7	818.5	818.5	819.4	818.5	818.5
12.5°	851.1	851.1	852.0	852.8	853.6	854.5	857.0	856.1	857.8	856.1	856.1
15°	892.1	893.8	892.1	892.1	894.6	896.3	897.1	897.1	898.8	898.0	896.3
17.5°	935.6	936.4	935.6	934.7	937.2	939.8	940.6	940.6	943.1	941.4	941.4
20°	979.9	980.7	979.1	978.2	981.6	981.6	983.2	984.1	986.6	987.4	984.9
22.5°	1020.9	1021.7	1020.9	1020.0	1023.4	1023.4	1025.9	1026.7	1030.1	1029.2	1029.2
25°	1061.0	1061.0	1060.2	1060.2	1063.5	1064.3	1066.8	1068.5	1071.9	1071.9	1071.9
27.5°	1097.8	1098.6	1096.9	1096.1	1102.8	1105.3	1107.0	1110.3	1112.8	1114.5	1113.7
30°	1139.6	1139.6	1138.7	1141.3	1145.4	1148.8	1152.1	1157.1	1162.2	1160.5	1160.5
32.5°	1188.9	1190.6	1189.7	1193.1	1198.1	1203.1	1207.3	1213.2	1215.7	1219.8	1216.5
35°	1255.0	1258.3	1256.6	1260.0	1264.2	1267.5	1276.7	1282.6	1286.7	1289.2	1287.6
37.5°	1337.7	1336.1	1339.4	1340.2	1348.6	1352.8	1363.7	1372.0	1378.7	1381.2	1379.5
40°	1440.6	1438.1	1442.2	1446.4	1457.3	1461.5	1474.0	1486.6	1495.8	1499.1	1497.4
42.5°	1563.5	1566.8	1573.5	1579.4	1594.4	1606.1	1620.3	1638.7	1648.8	1652.9	1647.1
45°	1724.8	1719.0	1731.5	1746.6	1754.9	1780.9	1804.3	1823.5	1840.2	1846.9	1840.2
47.5°	1908.8	1907.9	1923.0	1941.4	1963.1	1987.4	2015.0	2040.0	2069.3	2071.0	2062.6
50°	2111.9	2128.7	2137.0	2155.4	2195.6	2225.7	2260.8	2298.4	2325.1	2333.5	2318.5
52.5°	2356.9	2369.5	2374.5	2405.4	2442.2	2479.0	2528.3	2573.5	2604.4	2607.7	2600.2
55°	2622.8	2632.8	2642.0	2679.6	2719.8	2752.4	2815.1	2859.4	2890.3	2902.0	2897.0
57.5°	2897.9	2907.1	2918.8	2959.7	3000.7	3046.7	3106.0	3157.9	3193.8	3215.6	3209.7
60°	3203.0	3203.0	3229.8	3270.8	3304.2	3358.5	3420.4	3480.6	3519.9	3554.2	3545.0
62.5°	3524.1	3533.3	3559.2	3592.6	3627.8	3677.9	3748.2	3820.1	3880.3	3906.2	3905.3
65°	3767.4	3784.1	3818.4	3856.8	3915.4	3974.7	4063.4	4152.8	4225.6	4263.2	4263.2
67.5°	3838.5	3849.3	3892.0	3950.5	4034.9	4129.4	4249.8	4374.4	4473.9	4523.2	4492.3
69°	3781.6	3797.5	3835.1	3898.7	3999.0	4114.4	4257.3	4398.6	4514.0	4565.0	4529.1
70°	3715.6	3733.1	3770.7	3833.4	3937.1	4060.0	4203.0	4355.2	4478.9	4522.4	4481.4
72.5°	3446.3	3468.1	3494.8	3549.2	3642.8	3758.2	3886.9	4020.7	4139.4	4173.7	4122.7
75°	2987.3	2991.5	3004.9	3045.0	3078.5	3160.4	3269.9	3376.1	3465.6	3485.6	3431.3
77.5°	2114.5	2091.9	2069.3	2103.6	2130.3	2235.7	2354.4	2441.4	2535.0	2563.4	2508.2
80°	927.2	918.9	950.6	995.8	1113.7	1183.9	1300.1	1424.7	1504.1	1596.9	1497.4
82.5°	183.1	193.1	223.2	275.9	340.3	428.1	504.2	590.3	668.0	703.1	667.2
85°	74.4	81.1	92.0	102.8	110.4	123.7	145.5	180.6	199.0	201.5	191.5
87.5°	30.9	36.0	48.5	57.7	58.5	56.0	57.7	59.4	48.5	39.3	49.3
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°	736.6	736.6	736.6	736.6	736.6	736.6	736.6	736.6
2.5°	740.8	741.6	740.8	741.6	740.8	740.8	741.6	740.8
5°	759.2	760.0	759.2	758.3	757.5	758.3	758.3	758.3
7.5°	785.1	784.2	783.4	783.4	782.6	781.7	783.4	783.4
10°	816.9	816.0	814.3	814.3	813.5	813.5	813.5	813.5
12.5°	855.3	852.8	852.0	849.5	848.6	847.8	847.8	848.6
15°	895.4	892.9	892.1	887.9	887.9	887.1	887.1	887.1
17.5°	938.1	935.6	932.2	932.2	929.7	928.1	928.9	927.2
20°	981.6	978.2	976.5	975.7	972.4	972.4	972.4	971.5
22.5°	1024.2	1021.7	1019.2	1015.8	1012.5	1011.7	1011.7	1010.8
25°	1067.7	1063.5	1058.5	1055.1	1051.8	1049.3	1049.3	1049.3
27.5°	1111.2	1106.1	1098.6	1094.4	1089.4	1086.9	1086.9	1086.1
30°	1157.1	1151.3	1144.6	1138.7	1132.1	1129.5	1128.7	1127.0
32.5°	1212.3	1206.5	1199.8	1191.4	1184.7	1180.5	1180.5	1178.0
35°	1282.6	1275.9	1270.8	1260.0	1251.6	1244.9	1245.8	1247.4
37.5°	1374.5	1366.2	1362.0	1348.6	1337.7	1331.0	1331.0	1330.2
40°	1491.6	1483.2	1474.0	1461.5	1448.1	1438.9	1436.4	1436.4
42.5°	1640.4	1632.9	1620.3	1602.8	1586.9	1576.9	1568.5	1569.3
45°	1826.8	1817.6	1800.1	1778.3	1759.1	1744.9	1733.2	1733.2
47.5°	2053.4	2034.2	2009.9	1990.7	1958.1	1936.4	1928.0	1926.3
50°	2311.8	2275.8	2245.7	2218.1	2183.8	2161.3	2148.7	2145.4
52.5°	2582.7	2545.0	2507.4	2471.5	2429.7	2406.2	2386.2	2384.5
55°	2877.0	2829.3	2781.6	2746.5	2697.2	2673.0	2652.9	2641.2
57.5°	3177.1	3123.6	3089.3	3039.2	2987.3	2969.8	2950.5	2936.3
60°	3514.9	3456.4	3411.2	3358.5	3325.1	3287.5	3269.1	3258.2
62.5°	3860.2	3805.8	3748.2	3698.0	3651.2	3625.3	3600.2	3587.6
65°	4211.3	4121.9	4053.3	3983.9	3928.8	3881.9	3842.6	3837.6
67.5°	4427.1	4314.2	4199.6	4098.5	4017.4	3951.3	3911.2	3897.0
69°	4444.6	4321.7	4178.7	4057.5	3963.9	3900.3	3852.7	3837.6
70°	4396.1	4272.4	4121.9	3991.5	3894.5	3825.1	3785.8	3760.7
72.5°	4041.6	3932.9	3788.3	3659.5	3571.7	3490.6	3451.3	3441.3
75°	3334.3	3218.9	3086.0	3024.1	2963.1	2912.1	2885.3	2882.8
77.5°	2367.8	2249.9	2148.7	2067.6	2001.6	1969.0	1976.5	1948.9
80°	1355.3	1201.5	1079.4	1007.5	909.7	851.1	785.1	832.7
82.5°	582.7	470.7	358.7	291.8	222.4	176.4	145.5	135.4
85°	163.0	132.9	111.2	102.0	92.0	81.9	69.4	64.4
87.5°	55.2	52.7	46.8	46.8	42.6	36.0	25.1	22.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)