

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: P143968

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P143968  
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-E06-E-8030  
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE  
(6) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE  
Light Source: (126) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15523.8 lumens  
Efficiency: N/A  
Efficacy: 103.1 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

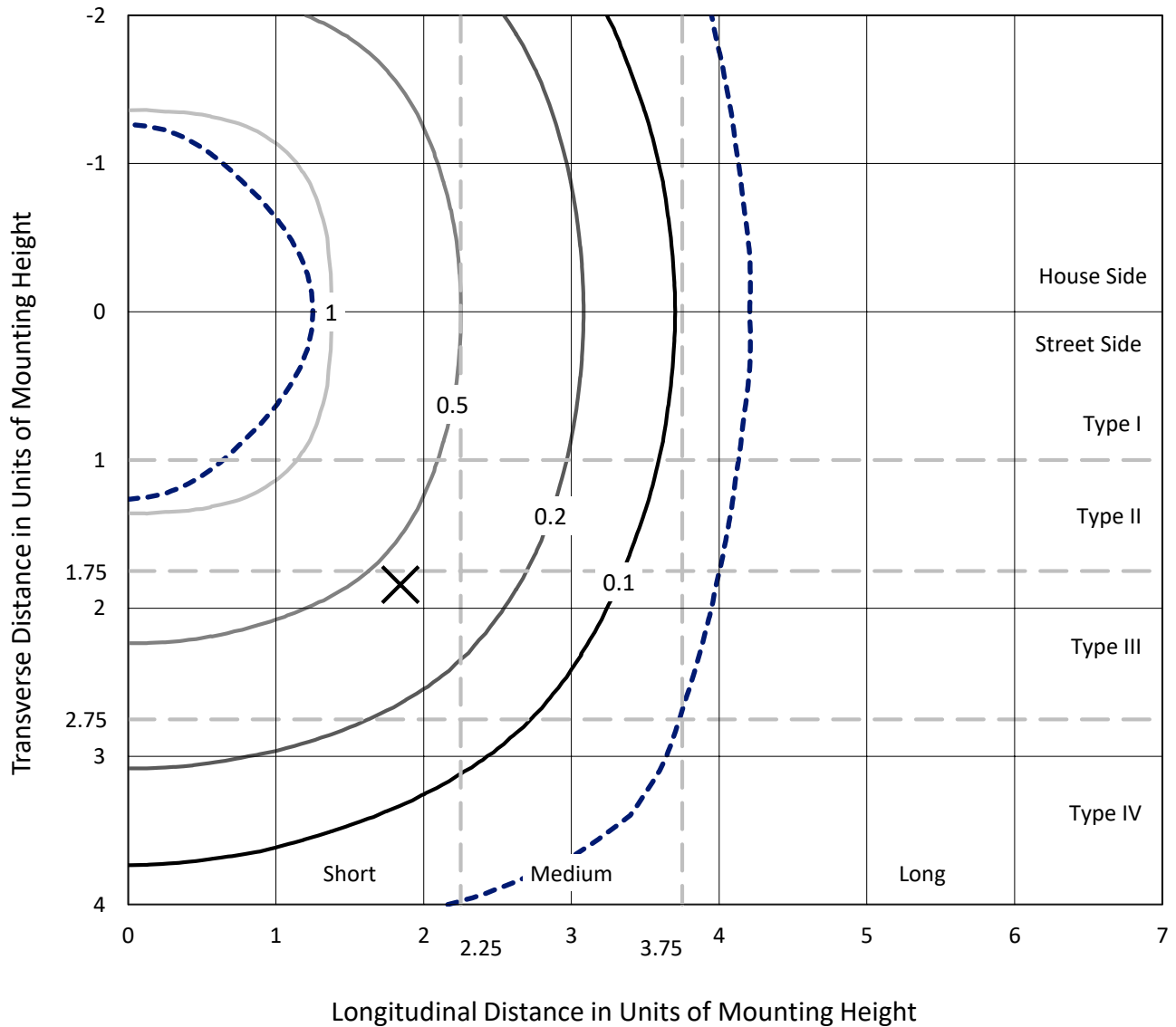
Input Watts (W): 150.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

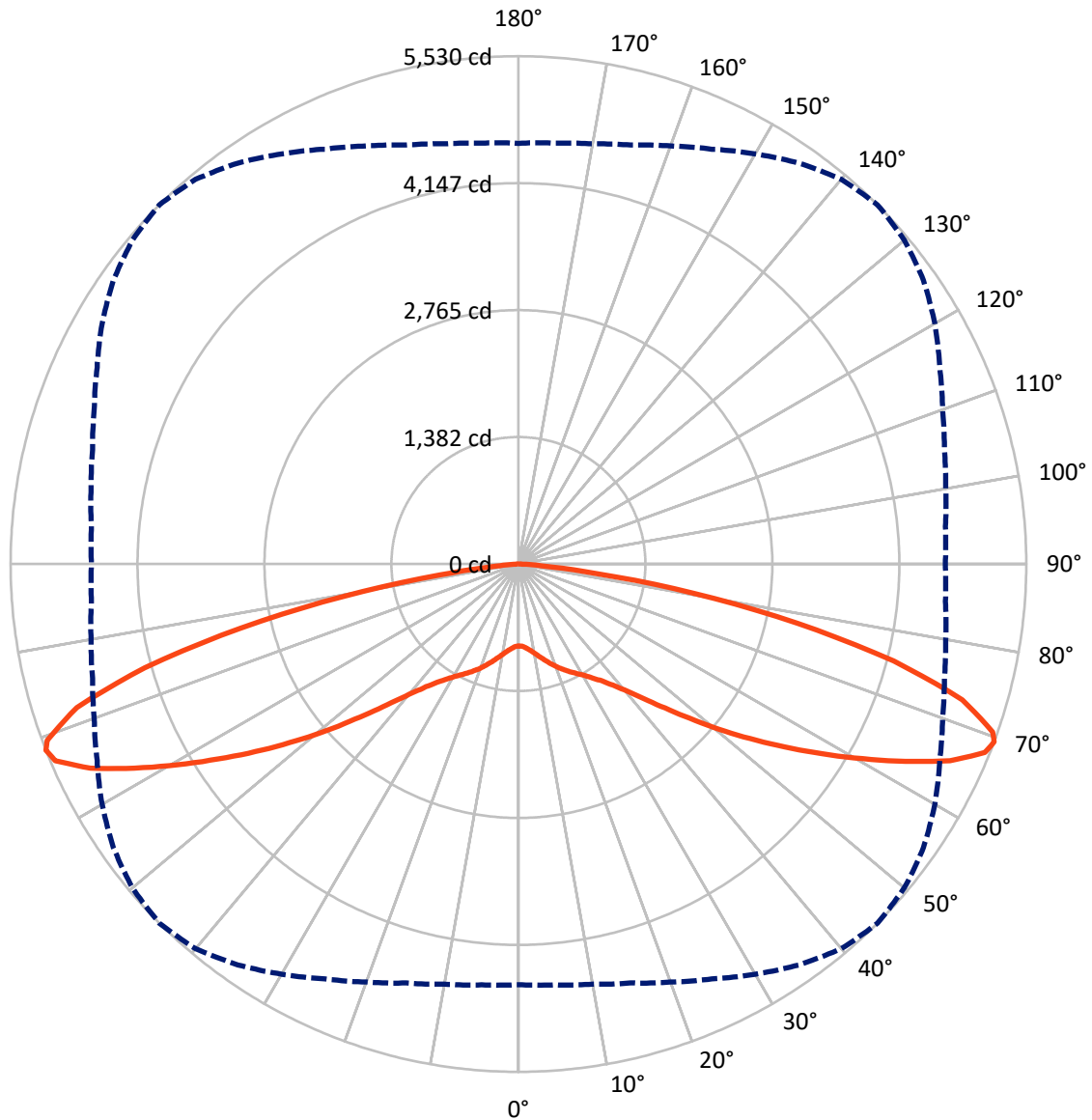
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.6 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	7761.9	0.0	7761.9
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	7761.9	0.0	7761.9
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	15523.8	0.0	15523.8
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.0	0.6
10°-20°	310.2	2.0
20°-30°	598.0	3.9
30°-40°	979.9	6.3
40°-50°	1703.8	11.0
50°-60°	3026.6	19.5
60°-70°	4699.1	30.3
70°-80°	3743.9	24.1
80°-90°	372.3	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°	15523.8	100.0
0°-180°	15523.8	100.0



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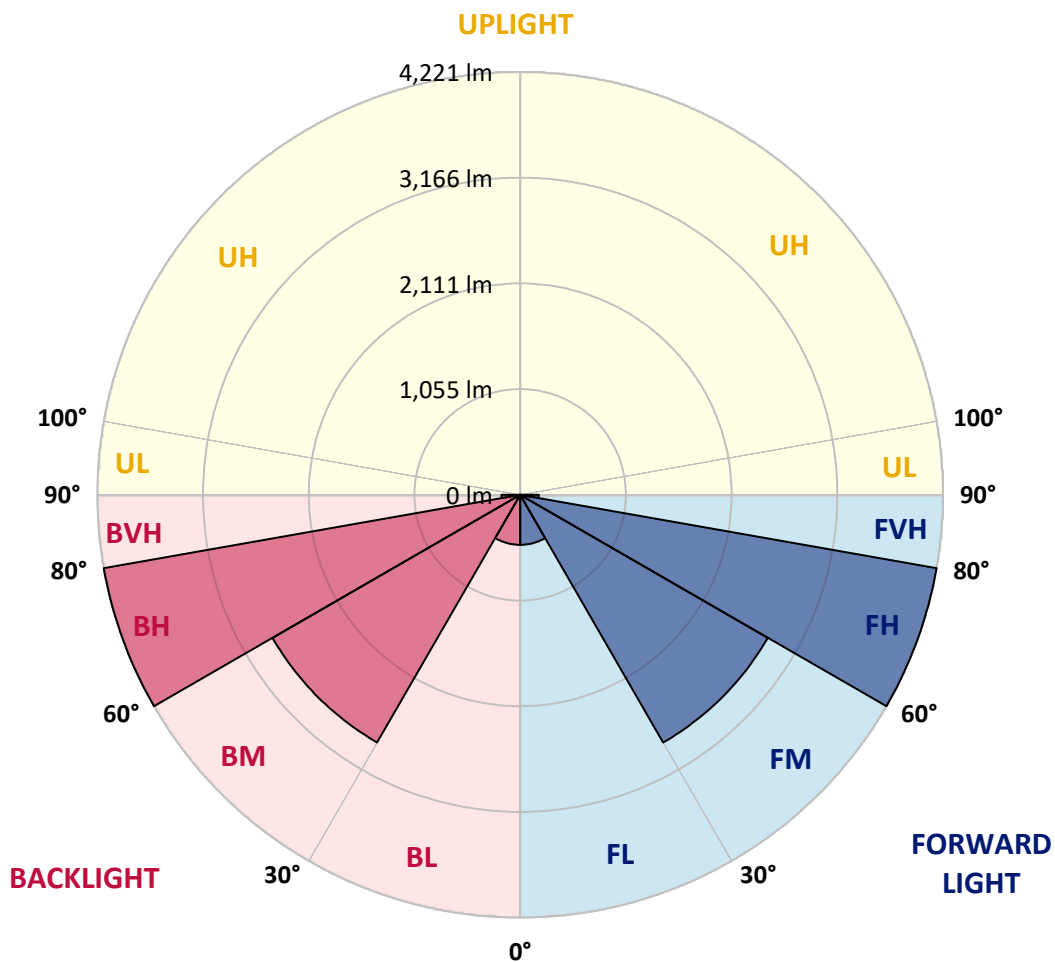
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	499.1	3.2			
FM	(30°-60°)	2855.2	18.4			
FH	(60°-80°)	4221.5	27.2			G2/5000
FVH	(80°-90°)	186.1	1.2			G2/225
BL	(0°-30°)	499.1	3.2	B1/500		
BM	(30°-60°)	2855.2	18.4	B3/5000		
BH	(60°-80°)	4221.5	27.2	B4/5000		G2/5000
BVH	(80°-90°)	186.1	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°	892.3	892.3	892.3	892.3	892.3	892.3	892.3	892.3	892.3	892.3	892.3
2.5°	899.4	899.4	899.4	898.3	898.3	897.3	898.3	897.3	897.3	897.3	897.3
5°	922.7	920.6	920.6	919.6	921.6	921.6	919.6	920.6	919.6	920.6	920.6
7.5°	952.0	952.0	952.0	951.0	953.0	952.0	951.0	952.0	952.0	951.0	951.0
10°	988.5	989.5	988.5	988.5	991.5	990.5	991.5	991.5	992.5	991.5	991.5
12.5°	1031.0	1031.0	1032.0	1033.0	1034.1	1035.1	1038.1	1037.1	1039.1	1037.1	1037.1
15°	1080.6	1082.7	1080.6	1080.6	1083.7	1085.7	1086.7	1086.7	1088.7	1087.7	1085.7
17.5°	1133.3	1134.3	1133.3	1132.3	1135.3	1138.4	1139.4	1139.4	1142.4	1140.4	1140.4
20°	1187.0	1188.0	1186.0	1185.0	1189.0	1189.0	1191.0	1192.1	1195.1	1196.1	1193.1
22.5°	1236.6	1237.6	1236.6	1235.6	1239.7	1239.7	1242.7	1243.7	1247.8	1246.7	1246.7
25°	1285.2	1285.2	1284.2	1284.2	1288.3	1289.3	1292.3	1294.3	1298.4	1298.4	1298.4
27.5°	1329.8	1330.8	1328.8	1327.8	1335.9	1338.9	1340.9	1345.0	1348.0	1350.0	1349.0
30°	1380.4	1380.4	1379.4	1382.5	1387.5	1391.6	1395.6	1401.7	1407.8	1405.8	1405.8
32.5°	1440.2	1442.2	1441.2	1445.3	1451.3	1457.4	1462.5	1469.6	1472.6	1477.7	1473.6
35°	1520.2	1524.2	1522.2	1526.3	1531.3	1535.4	1546.5	1553.6	1558.7	1561.7	1559.7
37.5°	1620.5	1618.4	1622.5	1623.5	1633.6	1638.7	1651.9	1662.0	1670.1	1673.1	1671.1
40°	1745.0	1742.0	1747.1	1752.1	1765.3	1770.4	1785.5	1800.7	1811.9	1815.9	1813.9
42.5°	1893.9	1898.0	1906.1	1913.2	1931.4	1945.6	1962.8	1985.1	1997.2	2002.3	1995.2
45°	2089.4	2082.3	2097.5	2115.7	2125.8	2157.2	2185.6	2208.9	2229.1	2237.3	2229.1
47.5°	2312.2	2311.2	2329.4	2351.7	2378.0	2407.4	2440.8	2471.2	2506.7	2508.7	2498.6
50°	2558.3	2578.6	2588.7	2611.0	2659.6	2696.0	2738.6	2784.2	2816.6	2826.7	2808.5
52.5°	2855.1	2870.2	2876.3	2913.8	2958.4	3002.9	3062.7	3117.4	3154.8	3158.9	3149.8
55°	3177.1	3189.3	3200.4	3246.0	3294.6	3334.1	3410.1	3463.7	3501.2	3515.4	3509.3
57.5°	3510.3	3521.5	3535.6	3585.3	3634.9	3690.6	3762.5	3825.3	3868.9	3895.2	3888.1
60°	3880.0	3880.0	3912.4	3962.0	4002.5	4068.4	4143.3	4216.2	4263.8	4305.4	4294.2
62.5°	4268.9	4280.0	4311.4	4352.0	4394.5	4455.3	4540.3	4627.4	4700.4	4731.8	4730.7
65°	4563.6	4583.9	4625.4	4672.0	4742.9	4814.8	4922.2	5030.5	5118.6	5164.2	5164.2
67.5°	4649.7	4662.9	4714.5	4785.4	4887.7	5002.2	5148.0	5298.9	5419.4	5479.2	5441.7
69°	4580.8	4600.1	4645.7	4722.6	4844.2	4983.9	5157.1	5328.3	5468.0	5529.8	5486.3
70°	4500.8	4522.1	4567.7	4643.6	4769.2	4918.1	5091.3	5275.6	5425.5	5478.2	5428.5
72.5°	4174.7	4201.0	4233.5	4299.3	4412.7	4552.5	4708.5	4870.5	5014.3	5055.8	4994.1
75°	3618.7	3623.8	3640.0	3688.6	3729.1	3828.3	3961.0	4089.6	4198.0	4222.3	4156.5
77.5°	2561.3	2534.0	2506.7	2548.2	2580.6	2708.2	2852.0	2957.3	3070.8	3105.2	3038.4
80°	1123.2	1113.1	1151.5	1206.2	1349.0	1434.1	1574.9	1725.8	1822.0	1934.4	1813.9
82.5°	221.8	234.0	270.4	334.2	412.2	518.5	610.7	715.0	809.2	851.8	808.2
85°	90.1	98.2	111.4	124.6	133.7	149.9	176.2	218.8	241.0	244.1	231.9
87.5°	37.5	43.5	58.7	69.9	70.9	67.9	69.9	71.9	58.7	47.6	59.8
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°	892.3	892.3	892.3	892.3	892.3	892.3	892.3	892.3
2.5°	897.3	898.3	897.3	898.3	897.3	897.3	898.3	897.3
5°	919.6	920.6	919.6	918.6	917.6	918.6	918.6	918.6
7.5°	951.0	950.0	949.0	949.0	948.0	947.0	949.0	949.0
10°	989.5	988.5	986.5	986.5	985.4	985.4	985.4	985.4
12.5°	1036.1	1033.0	1032.0	1029.0	1028.0	1027.0	1027.0	1028.0
15°	1084.7	1081.7	1080.6	1075.6	1075.6	1074.6	1074.6	1074.6
17.5°	1136.3	1133.3	1129.3	1129.3	1126.2	1124.2	1125.2	1123.2
20°	1189.0	1185.0	1182.9	1181.9	1177.9	1177.9	1177.9	1176.9
22.5°	1240.7	1237.6	1234.6	1230.5	1226.5	1225.5	1225.5	1224.5
25°	1293.3	1288.3	1282.2	1278.1	1274.1	1271.1	1271.1	1271.1
27.5°	1346.0	1339.9	1330.8	1325.7	1319.7	1316.6	1316.6	1315.6
30°	1401.7	1394.6	1386.5	1379.4	1371.3	1368.3	1367.3	1365.2
32.5°	1468.5	1461.5	1453.4	1443.2	1435.1	1430.1	1430.1	1427.0
35°	1553.6	1545.5	1539.4	1526.3	1516.1	1508.0	1509.1	1511.1
37.5°	1665.0	1654.9	1649.8	1633.6	1620.5	1612.4	1612.4	1611.3
40°	1806.8	1796.7	1785.5	1770.4	1754.2	1743.0	1740.0	1740.0
42.5°	1987.1	1978.0	1962.8	1941.5	1922.3	1910.1	1900.0	1901.0
45°	2212.9	2201.8	2180.5	2154.2	2130.9	2113.7	2099.5	2099.5
47.5°	2487.4	2464.1	2434.7	2411.5	2372.0	2345.6	2335.5	2333.5
50°	2800.4	2756.8	2720.4	2686.9	2645.4	2618.1	2602.9	2598.8
52.5°	3128.5	3082.9	3037.4	2993.8	2943.2	2914.8	2890.5	2888.5
55°	3485.0	3427.3	3369.5	3327.0	3267.3	3237.9	3213.6	3199.4
57.5°	3848.6	3783.8	3742.3	3681.5	3618.7	3597.4	3574.1	3556.9
60°	4257.8	4186.9	4132.2	4068.4	4027.9	3982.3	3960.0	3946.8
62.5°	4676.0	4610.2	4540.3	4479.6	4422.9	4391.5	4361.1	4345.9
65°	5101.4	4993.1	4910.0	4825.9	4759.1	4702.4	4654.8	4648.7
67.5°	5362.7	5226.0	5087.2	4964.7	4866.5	4786.4	4737.8	4720.6
69°	5384.0	5235.1	5061.9	4915.1	4801.6	4724.7	4666.9	4648.7
70°	5325.2	5175.4	4993.1	4835.1	4717.6	4633.5	4585.9	4555.5
72.5°	4895.8	4764.2	4588.9	4433.0	4326.6	4228.4	4180.8	4168.6
75°	4039.0	3899.2	3738.2	3663.3	3589.3	3527.5	3495.1	3492.1
77.5°	2868.2	2725.4	2602.9	2504.6	2424.6	2385.1	2394.2	2360.8
80°	1641.7	1455.4	1307.5	1220.4	1101.9	1031.0	951.0	1008.7
82.5°	705.9	570.2	434.5	353.5	269.4	213.7	176.2	164.1
85°	197.5	161.0	134.7	123.6	111.4	99.3	84.1	78.0
87.5°	66.8	63.8	56.7	56.7	51.7	43.5	30.4	27.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)