

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: P144235

Luminaire Tested: **LDRL-5XQ-F02-E**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P144235
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33699)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: LDRL-5XQ-F02-E
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (14) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5105.2 lumens
Efficiency: N/A
Efficacy: 92.8 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B3 - U0 - G2

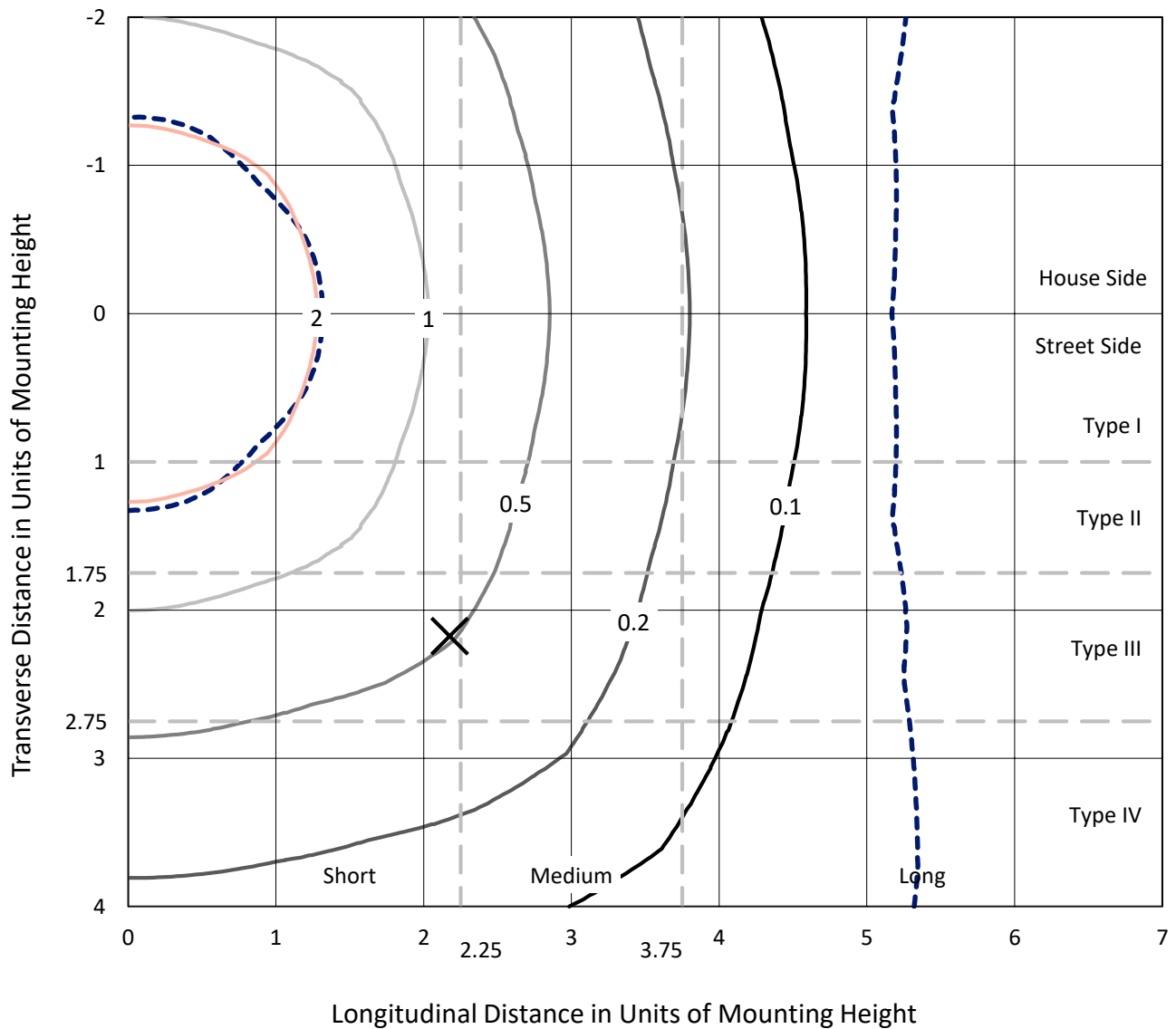
Input Watts (W): 55
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

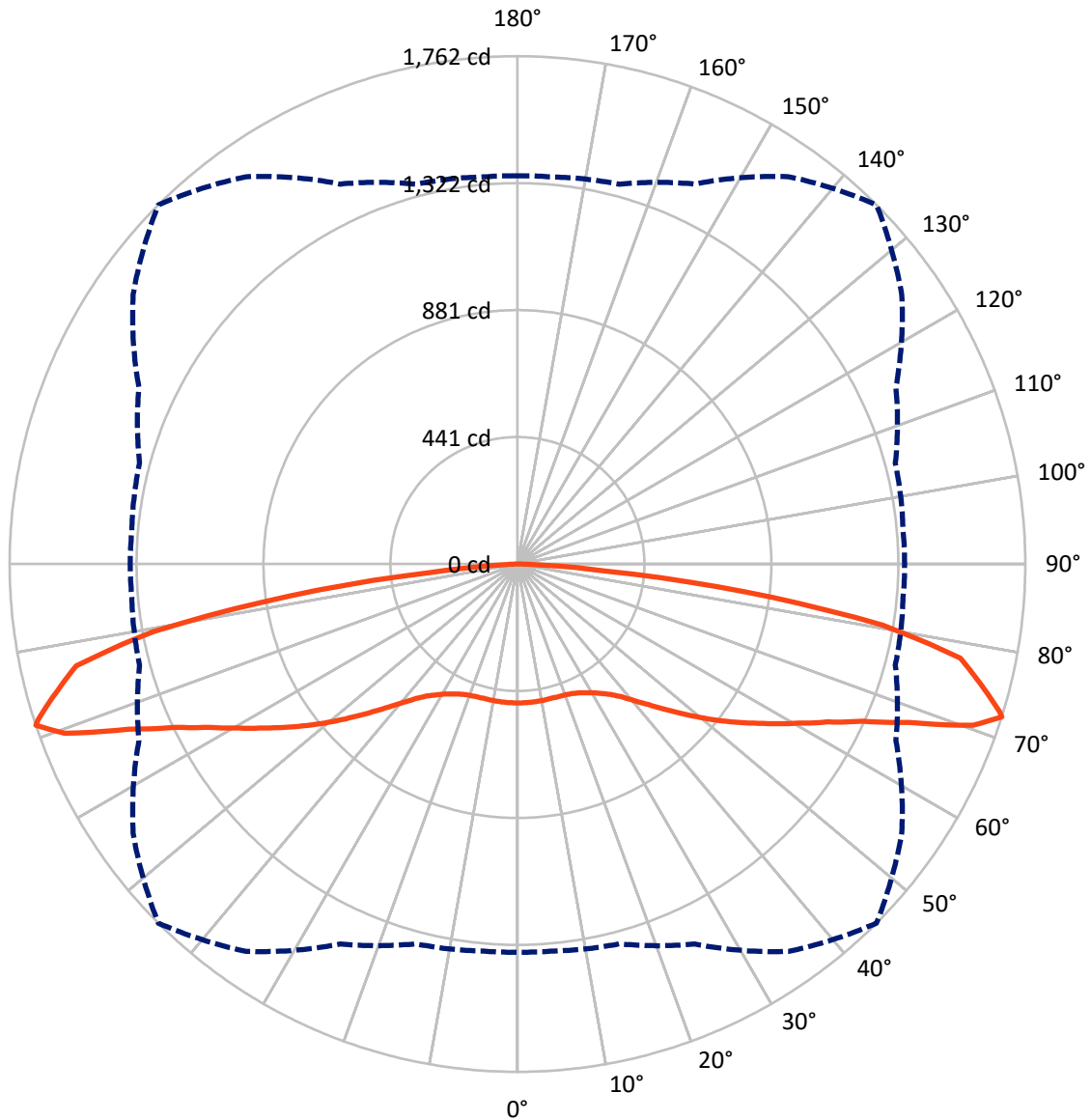
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.8 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72-Deg Vertical

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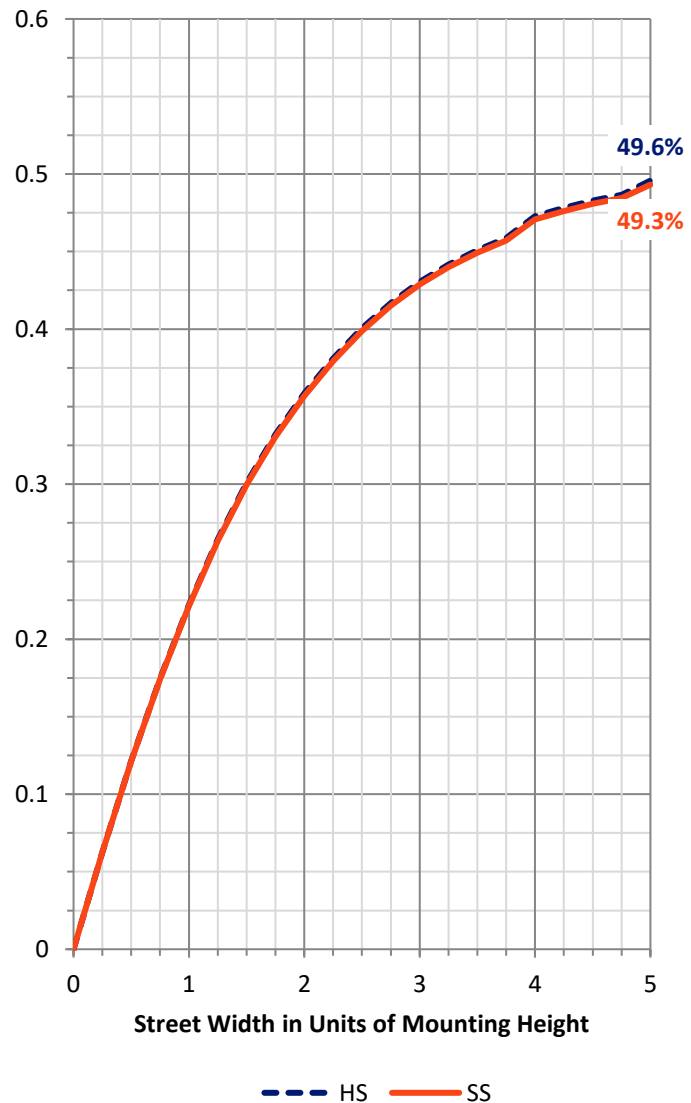
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2552.6	0.0	2552.6
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	2552.6	0.0	2552.6
	% Fixture	50.0	0.0	50.0
Total	Lumens	5105.2	0.0	5105.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.0	0.9
10°-20°	136.7	2.7
20°-30°	229.6	4.5
30°-40°	349.5	6.8
40°-50°	552.4	10.8
50°-60°	843.8	16.5
60°-70°	1236.1	24.2
70°-80°	1404.4	27.5
80°-90°	306.8	6.0
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°	5105.2	100.0
0°-180°	5105.2	100.0



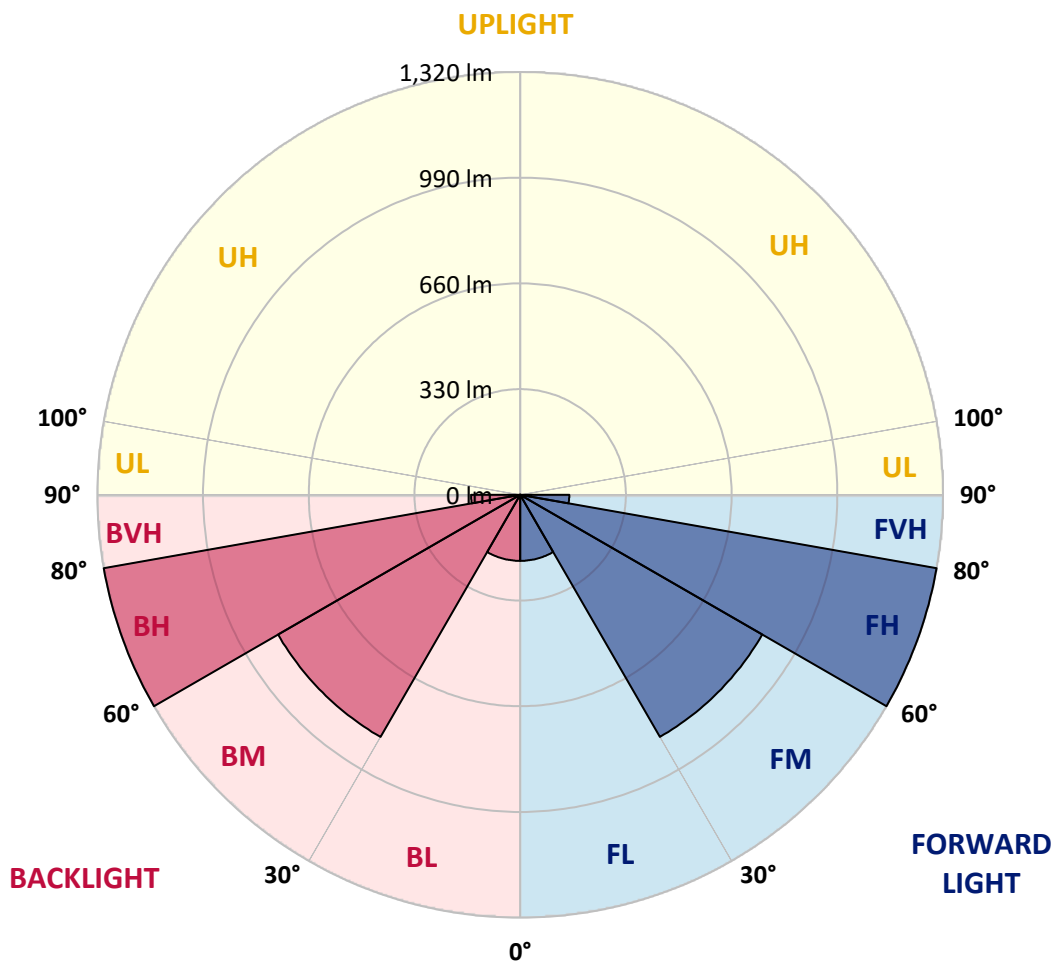
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	206.2	4.0			
FM	(30°-60°)	872.8	17.1			
FH	(60°-80°)	1320.3	25.9			G1/1800
FVH	(80°-90°)	153.4	3.0			G2/225
BL	(0°-30°)	206.2	4.0	B1/500		
BM	(30°-60°)	872.8	17.1	B1/1000		
BH	(60°-80°)	1320.3	25.9	B3/2500		G1/1800
BVH	(80°-90°)	153.4	3.0			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	482.1	482.1	482.1	482.1	482.1	482.1	482.1	482.1	482.1	482.1	482.1
2.5°	483.1	483.0	482.6	482.2	482.1	482.0	482.0	482.0	481.9	481.8	481.9
5°	483.1	482.9	482.7	482.4	482.2	481.9	481.9	482.0	481.9	481.8	482.0
7.5°	482.4	482.6	482.4	482.1	482.0	481.9	481.8	481.8	481.6	481.4	481.5
10°	482.6	483.2	482.8	482.2	482.1	482.0	481.6	481.3	481.2	481.1	481.0
12.5°	482.9	483.6	483.0	482.4	482.2	482.0	481.6	481.3	481.0	480.8	480.6
15°	484.0	484.4	483.9	483.4	482.9	482.4	482.1	481.8	481.3	480.8	480.5
17.5°	484.6	485.4	484.8	484.2	483.7	483.1	482.8	482.4	482.1	481.8	481.4
20°	485.8	486.6	486.0	485.6	485.2	485.0	484.7	484.4	484.2	483.9	483.4
22.5°	487.8	488.6	488.4	488.2	488.3	488.4	488.5	488.6	488.4	488.2	487.6
25°	492.3	492.4	492.7	493.0	493.5	494.0	494.4	494.8	495.1	495.3	494.6
27.5°	500.1	500.8	501.0	501.2	502.1	503.0	503.8	504.8	505.2	505.7	505.0
30°	510.2	510.2	510.8	511.4	512.8	514.2	515.3	516.4	517.4	518.2	517.7
32.5°	523.0	523.9	524.7	525.5	527.2	529.0	531.0	533.0	534.1	535.2	534.4
35°	542.7	543.7	544.5	545.3	547.2	549.0	551.2	553.4	554.4	555.4	554.8
37.5°	570.4	570.4	571.6	572.8	573.9	575.0	578.0	581.0	582.2	583.5	582.5
40°	607.9	608.0	608.3	608.6	609.7	610.8	614.4	618.0	620.2	622.3	620.2
42.5°	651.0	652.8	652.8	652.6	653.4	654.2	657.6	661.1	664.2	667.2	666.0
45°	701.8	701.6	700.9	700.2	702.4	704.6	709.6	714.6	717.3	720.0	717.4
47.5°	753.2	752.7	751.8	750.9	753.1	755.4	762.8	770.2	774.1	778.0	773.8
50°	804.4	806.4	805.2	804.0	807.4	810.7	820.1	829.4	835.2	840.9	836.1
52.5°	861.0	862.5	861.2	859.8	864.4	869.0	880.1	891.2	898.8	906.4	900.0
55°	919.6	917.8	918.6	919.4	923.6	927.9	941.6	955.3	964.4	973.5	966.2
57.5°	974.4	975.1	974.4	973.6	980.4	987.2	1004.4	1021.7	1033.1	1044.4	1035.4
60°	1030.6	1030.8	1029.1	1027.4	1034.8	1042.2	1066.9	1091.7	1106.5	1121.2	1108.8
62.5°	1093.3	1093.2	1090.2	1087.4	1096.1	1104.8	1135.4	1166.2	1186.4	1206.8	1191.6
65°	1170.3	1168.3	1166.6	1165.0	1175.0	1185.0	1223.1	1261.2	1288.6	1316.0	1296.5
67.5°	1283.7	1282.2	1278.7	1275.2	1286.4	1297.6	1346.4	1395.3	1430.7	1466.2	1440.3
70°	1408.6	1405.7	1408.1	1410.4	1436.2	1462.0	1527.6	1593.1	1635.0	1677.0	1633.6
72°	1346.9	1348.1	1356.1	1364.1	1409.2	1454.4	1547.5	1640.6	1701.3	1762.0	1694.9
72.5°	1325.4	1326.4	1335.5	1344.6	1387.7	1430.8	1526.8	1622.8	1685.6	1748.5	1679.4
75°	1234.3	1237.0	1247.4	1257.9	1301.6	1345.3	1442.1	1539.0	1599.1	1659.3	1590.2
77.5°	1085.6	1093.8	1104.5	1115.2	1167.1	1219.1	1328.6	1438.0	1504.5	1571.0	1492.6
80°	828.5	825.5	843.8	862.2	911.8	961.6	1046.2	1130.9	1207.5	1284.1	1195.9
82.5°	322.0	329.0	367.0	405.0	457.1	509.2	585.0	660.9	729.8	798.8	725.4
85°	33.2	37.8	51.4	65.1	93.4	121.8	168.1	214.3	259.6	305.0	255.8
87.5°	13.4	14.7	18.9	23.1	24.2	25.3	30.6	35.8	35.6	35.4	34.8
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°	482.1	482.1	482.1	482.1	482.1	482.1	482.1	482.1
2.5°	482.0	482.1	482.2	482.2	482.2	482.5	482.8	482.4
5°	482.1	482.2	482.2	482.2	482.2	482.5	482.8	482.4
7.5°	481.6	481.6	481.6	481.8	482.1	482.2	482.2	482.1
10°	480.8	480.9	481.0	481.2	481.4	481.7	482.0	482.1
12.5°	480.3	480.4	480.4	480.7	481.0	481.2	481.4	481.8
15°	480.2	480.4	480.4	480.6	480.8	481.1	481.4	481.8
17.5°	481.0	480.8	480.6	480.8	481.0	481.4	481.8	482.1
20°	482.8	482.6	482.3	482.3	482.2	482.7	483.1	483.1
22.5°	487.0	486.2	485.4	485.2	485.1	485.2	485.2	485.4
25°	493.8	492.5	491.2	490.8	490.4	490.2	490.0	490.4
27.5°	504.2	502.7	501.2	500.4	499.4	499.0	498.4	498.6
30°	517.1	515.4	513.6	512.2	510.6	510.0	509.4	509.5
32.5°	533.5	531.4	529.3	527.3	525.3	524.4	523.6	523.7
35°	554.2	551.8	549.4	547.8	546.2	544.8	543.4	544.5
37.5°	581.5	579.3	577.0	575.9	574.8	573.6	572.4	572.6
40°	618.2	615.8	613.6	612.6	611.8	610.2	608.6	608.9
42.5°	664.8	661.2	657.8	656.1	654.5	653.8	653.0	653.5
45°	714.9	711.4	708.0	706.6	705.2	703.2	701.2	703.0
47.5°	769.7	765.3	761.0	758.5	756.0	756.7	757.3	755.9
50°	831.3	824.0	816.6	813.7	810.8	810.9	810.8	810.7
52.5°	893.6	883.4	873.2	870.8	868.3	867.7	867.1	866.5
55°	959.0	946.5	934.0	929.4	924.8	925.4	926.1	927.9
57.5°	1026.2	1009.8	993.4	988.2	982.9	983.3	983.7	986.7
60°	1096.3	1075.1	1053.8	1048.0	1042.2	1043.7	1045.3	1047.1
62.5°	1176.4	1150.7	1125.0	1117.2	1109.4	1111.3	1113.3	1118.1
65°	1277.0	1244.9	1212.8	1204.7	1196.5	1197.4	1198.4	1206.6
67.5°	1414.4	1371.8	1329.1	1321.6	1314.0	1315.4	1316.7	1330.1
70°	1590.1	1526.9	1463.6	1432.5	1401.4	1396.6	1391.7	1398.8
72°	1627.8	1538.4	1449.1	1403.2	1357.4	1350.2	1343.0	1343.6
72.5°	1610.4	1520.1	1429.8	1385.2	1340.6	1334.8	1328.9	1327.8
75°	1521.1	1432.8	1344.4	1298.4	1252.4	1241.2	1230.0	1230.0
77.5°	1414.2	1302.8	1191.4	1141.7	1092.0	1080.4	1068.8	1059.6
80°	1107.7	1007.9	908.0	857.6	807.2	788.6	769.9	758.8
82.5°	652.0	560.2	468.4	404.3	340.3	321.0	301.8	275.1
85°	206.6	158.9	111.3	86.8	62.4	50.4	38.4	33.7
87.5°	34.3	27.9	21.4	20.7	20.0	15.7	11.4	9.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)