

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: P144225

Luminaire Tested: **LDRL-5XQ-F01-E**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P144225
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-F01-E
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (7) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2552.6 lumens
Efficiency: N/A
Efficacy: 98.6 lumens/watt
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B2 - U0 - G1

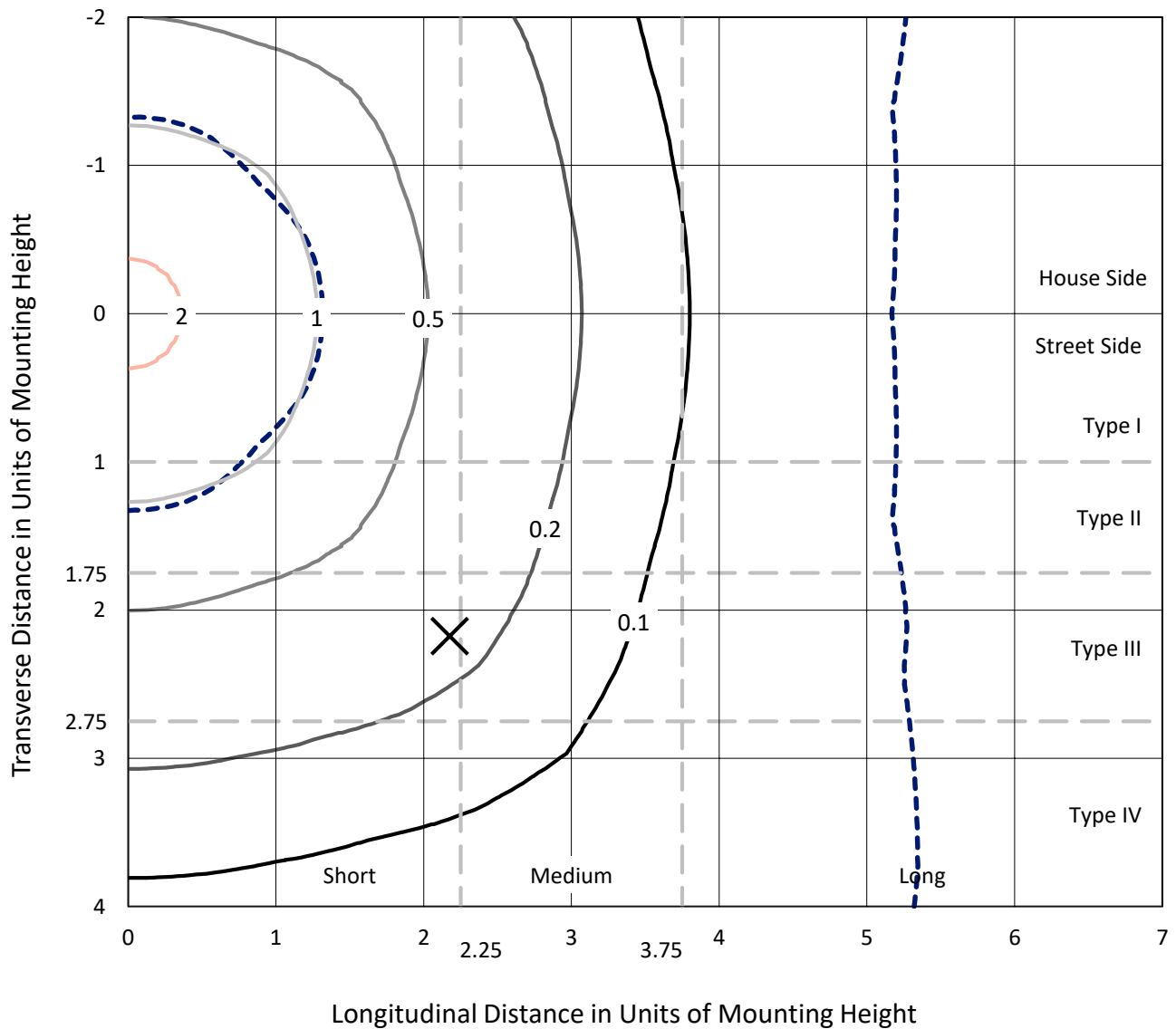
Input Watts (W): 25.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

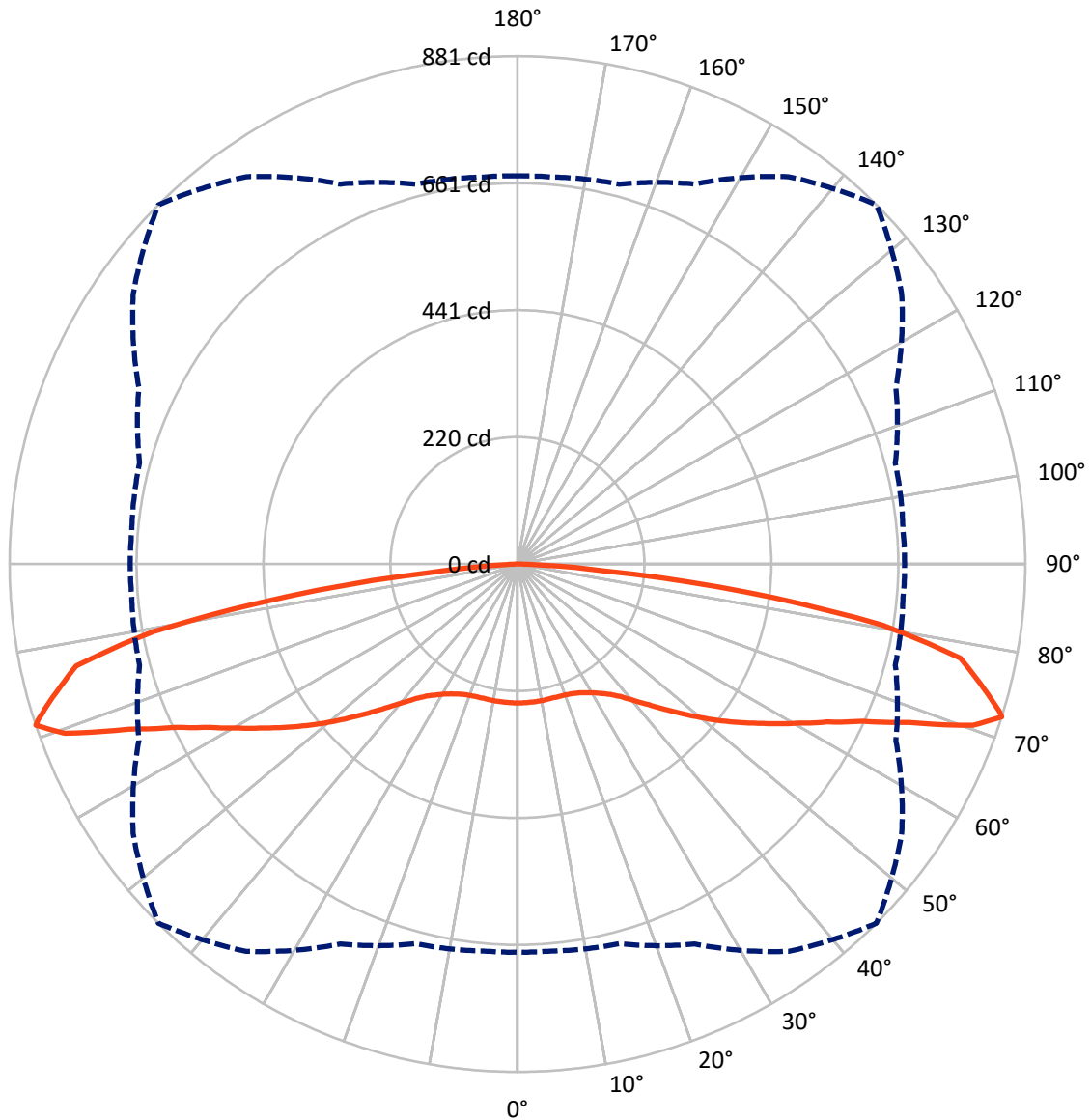
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2.4 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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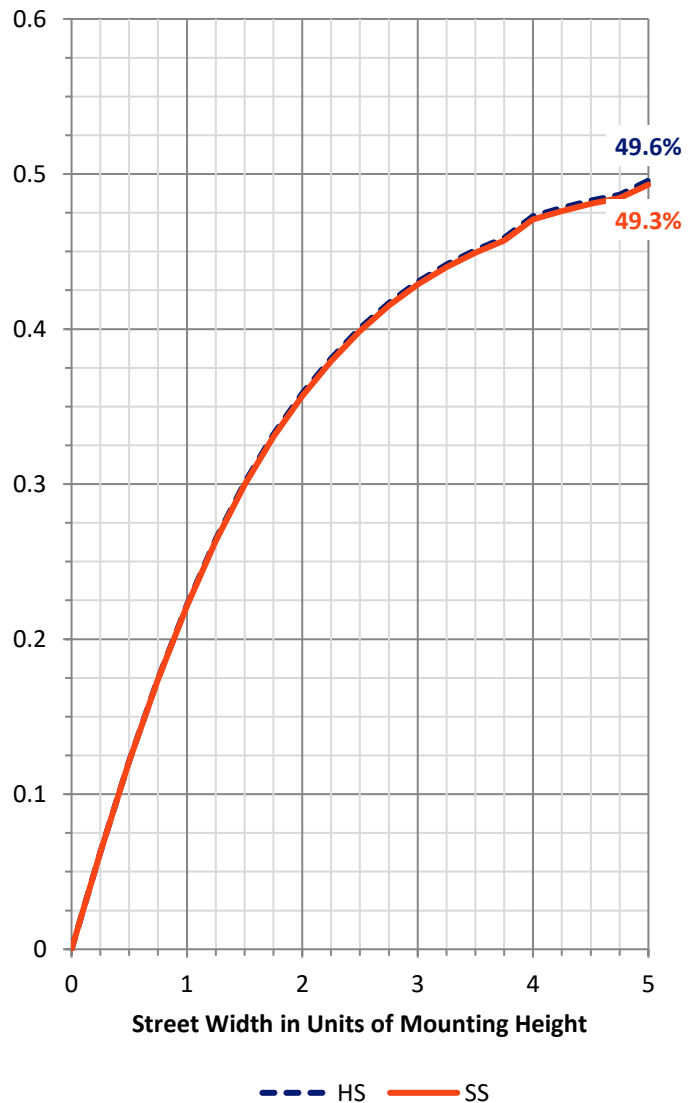
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1276.3	0.0	1276.3
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	1276.3	0.0	1276.3
	% Fixture	50.0	0.0	50.0
Total	Lumens	2552.6	0.0	2552.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.0	0.9
10°-20°	68.3	2.7
20°-30°	114.8	4.5
30°-40°	174.7	6.8
40°-50°	276.2	10.8
50°-60°	421.9	16.5
60°-70°	618.1	24.2
70°-80°	702.2	27.5
80°-90°	153.4	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°	2552.6	100.0
0°-180°	2552.6	100.0



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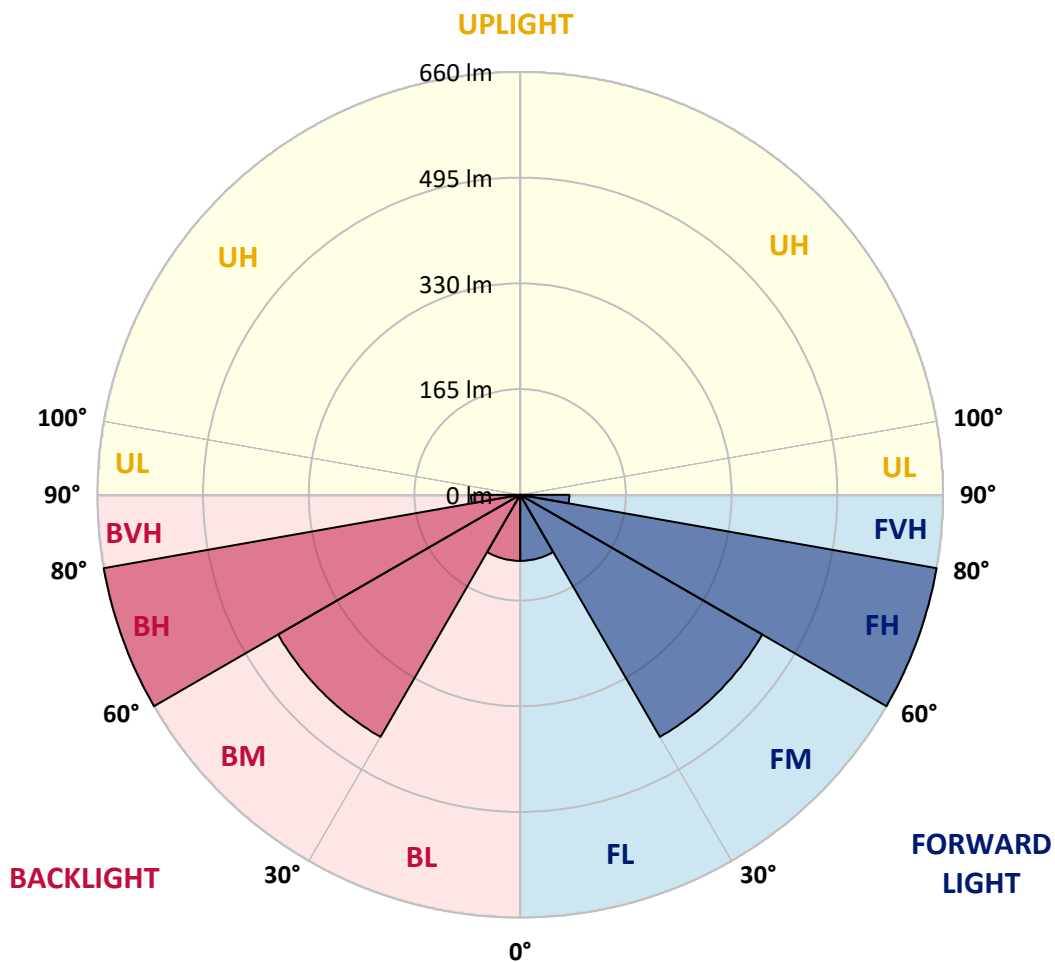
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	103.1	4.0			
FM	(30°-60°)	436.4	17.1			
FH	(60°-80°)	660.1	25.9			G1/1800
FVH	(80°-90°)	76.7	3.0			G1/100
BL	(0°-30°)	103.1	4.0	B0/110		
BM	(30°-60°)	436.4	17.1	B1/1000		
BH	(60°-80°)	660.1	25.9	B2/1000		G1/1800
BVH	(80°-90°)	76.7	3.0			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	241.1	241.1	241.1	241.1	241.1	241.1	241.1	241.1	241.1	241.1	241.1
2.5°	241.6	241.4	241.3	241.2	241.0	241.0	241.0	241.0	240.9	240.9	240.9
5°	241.6	241.5	241.3	241.2	241.1	241.0	241.0	241.0	240.9	240.8	241.0
7.5°	241.2	241.3	241.2	241.0	241.0	241.0	241.0	240.9	240.8	240.7	240.8
10°	241.3	241.6	241.4	241.2	241.1	241.0	240.8	240.6	240.6	240.6	240.5
12.5°	241.4	241.8	241.5	241.2	241.1	241.0	240.8	240.6	240.5	240.4	240.2
15°	242.0	242.2	242.0	241.7	241.5	241.2	241.1	240.9	240.6	240.4	240.3
17.5°	242.3	242.7	242.4	242.1	241.8	241.6	241.4	241.2	241.0	240.9	240.7
20°	242.8	243.3	243.0	242.8	242.6	242.4	242.3	242.2	242.1	242.0	241.7
22.5°	244.0	244.3	244.2	244.1	244.2	244.2	244.2	244.2	244.2	244.2	243.8
25°	246.2	246.2	246.3	246.5	246.8	247.0	247.2	247.4	247.6	247.7	247.3
27.5°	250.0	250.4	250.5	250.6	251.0	251.4	251.9	252.4	252.6	252.8	252.5
30°	255.1	255.1	255.4	255.6	256.4	257.1	257.6	258.2	258.7	259.2	258.8
32.5°	261.6	261.9	262.4	262.8	263.6	264.4	265.5	266.5	267.1	267.6	267.2
35°	271.4	271.8	272.3	272.7	273.6	274.5	275.6	276.7	277.2	277.8	277.4
37.5°	285.2	285.2	285.8	286.4	286.9	287.5	289.0	290.5	291.1	291.7	291.2
40°	304.0	304.0	304.2	304.3	304.8	305.4	307.2	309.0	310.1	311.2	310.1
42.5°	325.5	326.4	326.4	326.4	326.7	327.0	328.8	330.5	332.0	333.6	333.0
45°	351.0	350.8	350.4	350.1	351.2	352.4	354.8	357.3	358.7	360.0	358.8
47.5°	376.6	376.4	375.9	375.4	376.6	377.7	381.4	385.1	387.0	389.0	386.9
50°	402.2	403.2	402.6	402.0	403.7	405.4	410.0	414.8	417.6	420.4	418.0
52.5°	430.5	431.2	430.6	430.0	432.2	434.5	440.0	445.6	449.4	453.2	450.0
55°	459.8	458.9	459.3	459.6	461.8	464.0	470.8	477.6	482.2	486.7	483.1
57.5°	487.2	487.6	487.2	486.8	490.2	493.6	502.2	510.8	516.6	522.2	517.7
60°	515.3	515.4	514.5	513.7	517.4	521.1	533.5	545.8	553.2	560.6	554.4
62.5°	546.7	546.6	545.1	543.7	548.0	552.4	567.7	583.0	593.2	603.4	595.8
65°	585.1	584.2	583.3	582.5	587.5	592.4	611.6	630.6	644.3	658.0	648.2
67.5°	641.8	641.1	639.4	637.7	643.2	648.8	673.2	697.6	715.4	733.1	720.1
70°	704.2	702.8	704.0	705.2	718.1	731.0	763.8	796.6	817.5	838.5	816.8
72°	673.4	674.0	678.0	682.0	704.6	727.2	773.8	820.3	850.6	881.0	847.4
72.5°	662.7	663.2	667.8	672.3	693.9	715.4	763.4	811.4	842.8	874.2	839.8
75°	617.2	618.5	623.8	629.0	650.8	672.6	721.0	769.5	799.6	829.6	795.1
77.5°	542.8	546.9	552.2	557.6	583.6	609.6	664.3	719.1	752.3	785.5	746.3
80°	414.2	412.8	421.9	431.1	456.0	480.8	523.1	565.4	603.7	642.0	597.9
82.5°	161.0	164.5	183.5	202.5	228.6	254.6	292.5	330.4	364.9	399.4	362.7
85°	16.6	18.9	25.7	32.6	46.8	61.0	84.1	107.2	129.8	152.5	127.9
87.5°	6.7	7.4	9.5	11.6	12.1	12.6	15.3	18.0	17.8	17.6	17.4
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°	241.1	241.1	241.1	241.1	241.1	241.1	241.1	241.1
2.5°	241.0	241.0	241.2	241.1	241.1	241.2	241.4	241.2
5°	241.0	241.1	241.2	241.1	241.1	241.2	241.4	241.2
7.5°	240.8	240.8	240.8	240.9	241.0	241.1	241.2	241.1
10°	240.4	240.4	240.4	240.6	240.8	240.9	241.0	241.1
12.5°	240.1	240.2	240.2	240.3	240.4	240.6	240.7	240.9
15°	240.2	240.2	240.2	240.3	240.4	240.6	240.8	240.9
17.5°	240.4	240.4	240.3	240.4	240.5	240.7	240.9	241.1
20°	241.4	241.2	241.1	241.1	241.2	241.4	241.6	241.5
22.5°	243.6	243.1	242.7	242.6	242.6	242.6	242.6	242.7
25°	247.0	246.3	245.6	245.4	245.2	245.1	245.0	245.2
27.5°	252.1	251.4	250.6	250.2	249.8	249.5	249.2	249.3
30°	258.6	257.7	256.8	256.1	255.4	255.0	254.7	254.8
32.5°	266.8	265.7	264.7	263.7	262.7	262.2	261.8	261.9
35°	277.1	275.9	274.8	273.9	273.0	272.4	271.7	272.3
37.5°	290.8	289.6	288.5	288.0	287.4	286.8	286.2	286.3
40°	309.1	307.9	306.8	306.3	305.8	305.0	304.2	304.5
42.5°	332.4	330.6	328.9	328.1	327.2	326.9	326.5	326.7
45°	357.5	355.7	354.0	353.3	352.6	351.6	350.6	351.5
47.5°	384.8	382.7	380.5	379.2	378.0	378.4	378.7	377.9
50°	415.6	412.0	408.3	406.8	405.4	405.4	405.4	405.3
52.5°	446.8	441.7	436.6	435.4	434.2	433.8	433.6	433.2
55°	479.4	473.2	467.0	464.7	462.4	462.7	463.0	463.9
57.5°	513.2	505.0	496.8	494.1	491.4	491.6	491.8	493.3
60°	548.2	537.6	527.0	524.0	521.1	521.9	522.6	523.5
62.5°	588.2	575.4	562.5	558.6	554.7	555.7	556.6	559.0
65°	638.4	622.4	606.4	602.4	598.2	598.7	599.2	603.3
67.5°	707.2	685.9	664.6	660.8	657.0	657.7	658.4	665.0
70°	795.0	763.4	731.8	716.3	700.7	698.2	695.8	699.4
72°	813.9	769.2	724.6	701.6	678.7	675.1	671.5	671.8
72.5°	805.2	760.1	714.9	692.6	670.4	667.4	664.4	663.9
75°	760.6	716.4	672.2	649.2	626.2	620.6	615.0	615.0
77.5°	707.0	651.4	595.7	570.8	546.0	540.2	534.4	529.8
80°	553.8	504.0	454.0	428.8	403.6	394.2	384.9	379.4
82.5°	326.0	280.1	234.2	202.2	170.2	160.5	150.9	137.5
85°	103.3	79.5	55.6	43.4	31.2	25.2	19.2	16.8
87.5°	17.2	14.0	10.8	10.4	10.0	7.8	5.7	4.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)