

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: P144220

Luminaire Tested: **LDRL-5XQ-E01-E**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P144220
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-E01-E
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (21) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3092.1 lumens
Efficiency: N/A
Efficacy: 125.2 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

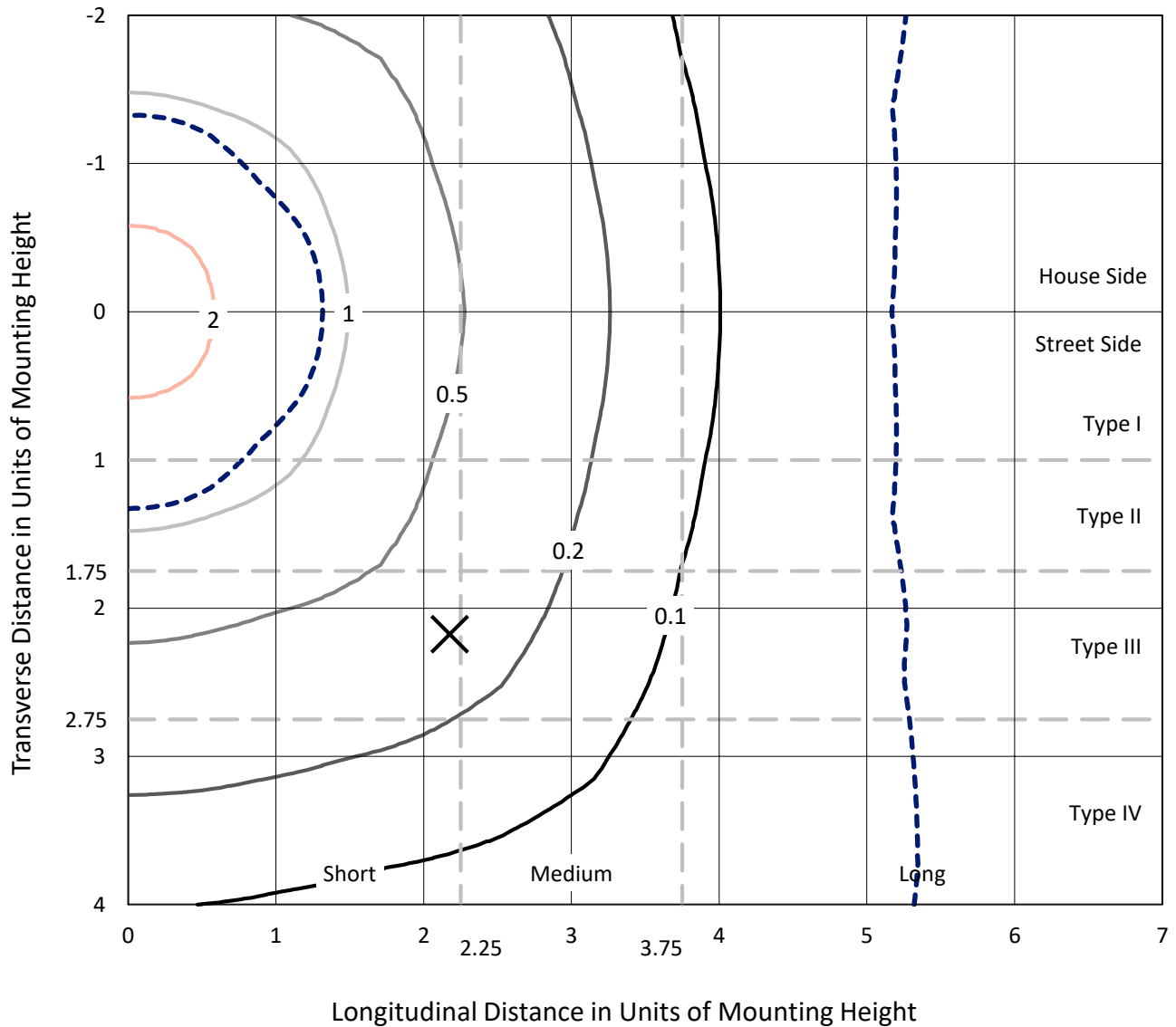
Input Watts (W): 24.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

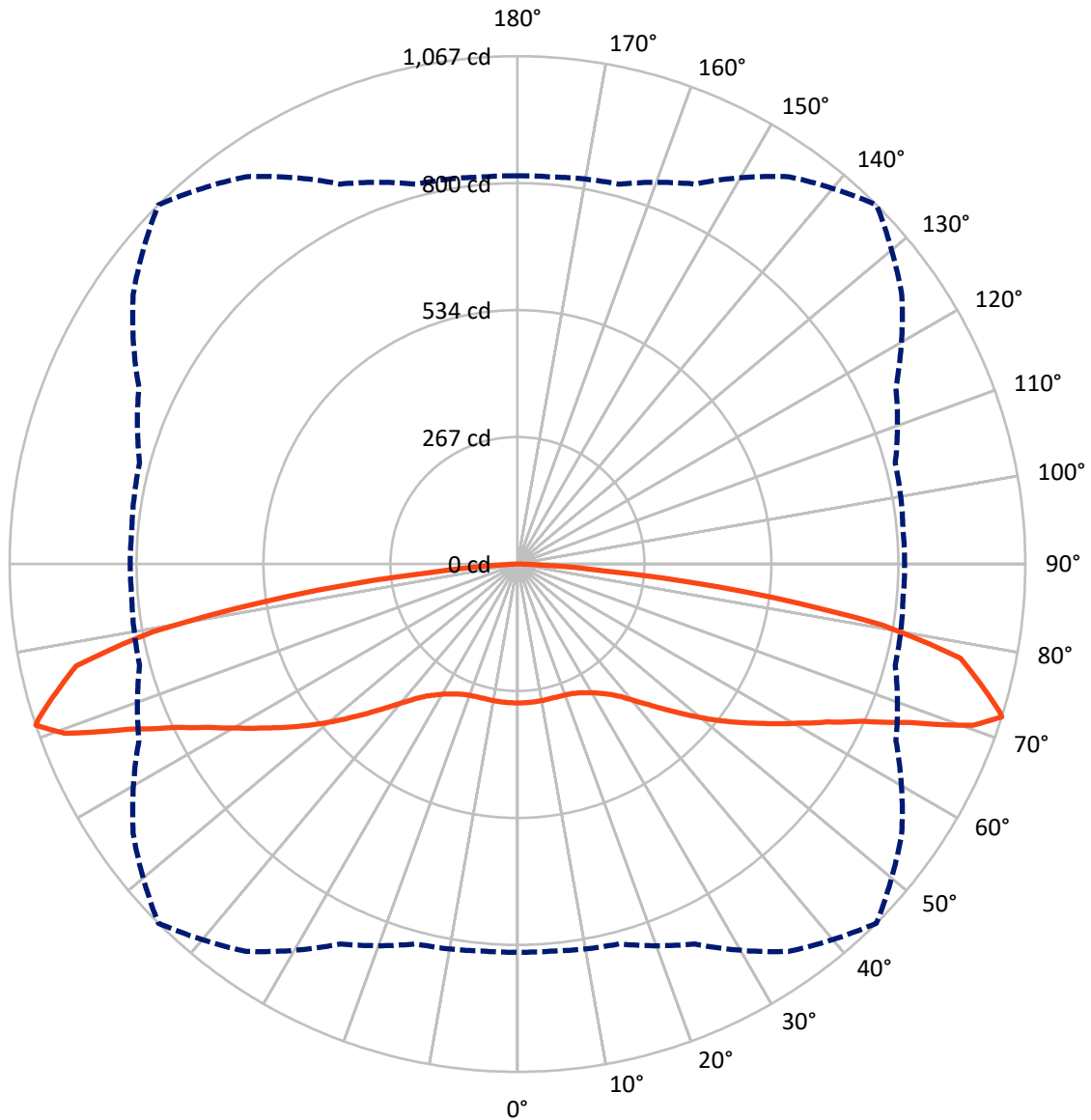
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2.9 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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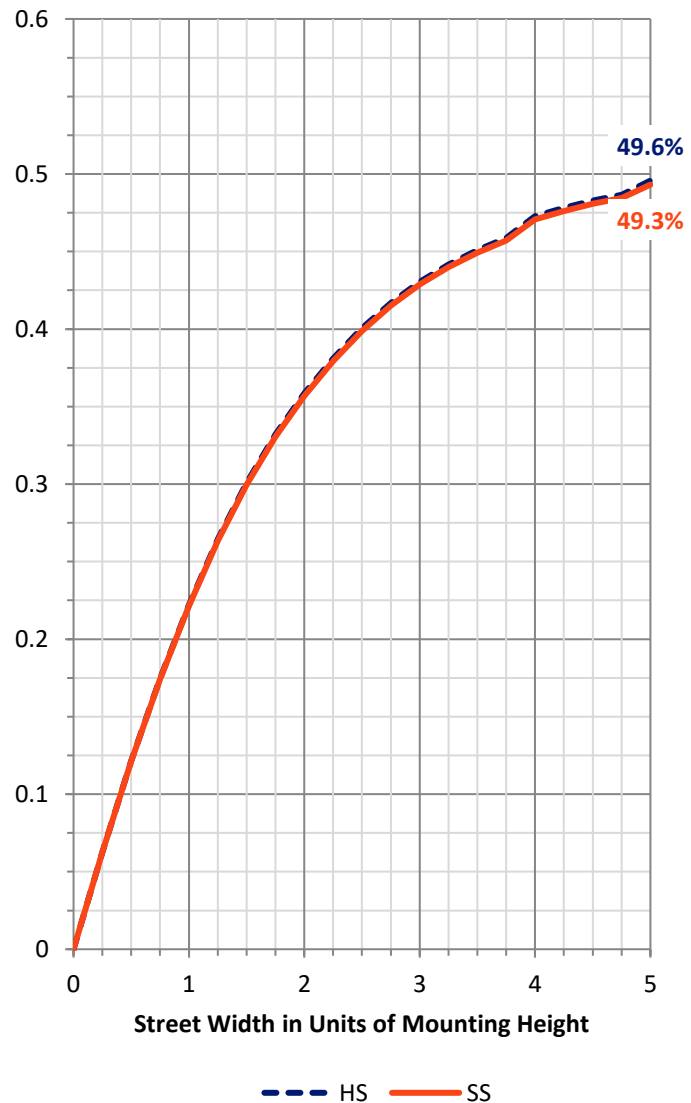
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1546.1	0.0	1546.1
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	1546.1	0.0	1546.1
	% Fixture	50.0	0.0	50.0
Total	Lumens	3092.1	0.0	3092.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.9	0.9
10°-20°	82.8	2.7
20°-30°	139.1	4.5
30°-40°	211.7	6.8
40°-50°	334.6	10.8
50°-60°	511.1	16.5
60°-70°	748.7	24.2
70°-80°	850.6	27.5
80°-90°	185.8	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°	3092.1	100.0
0°-180°	3092.1	100.0



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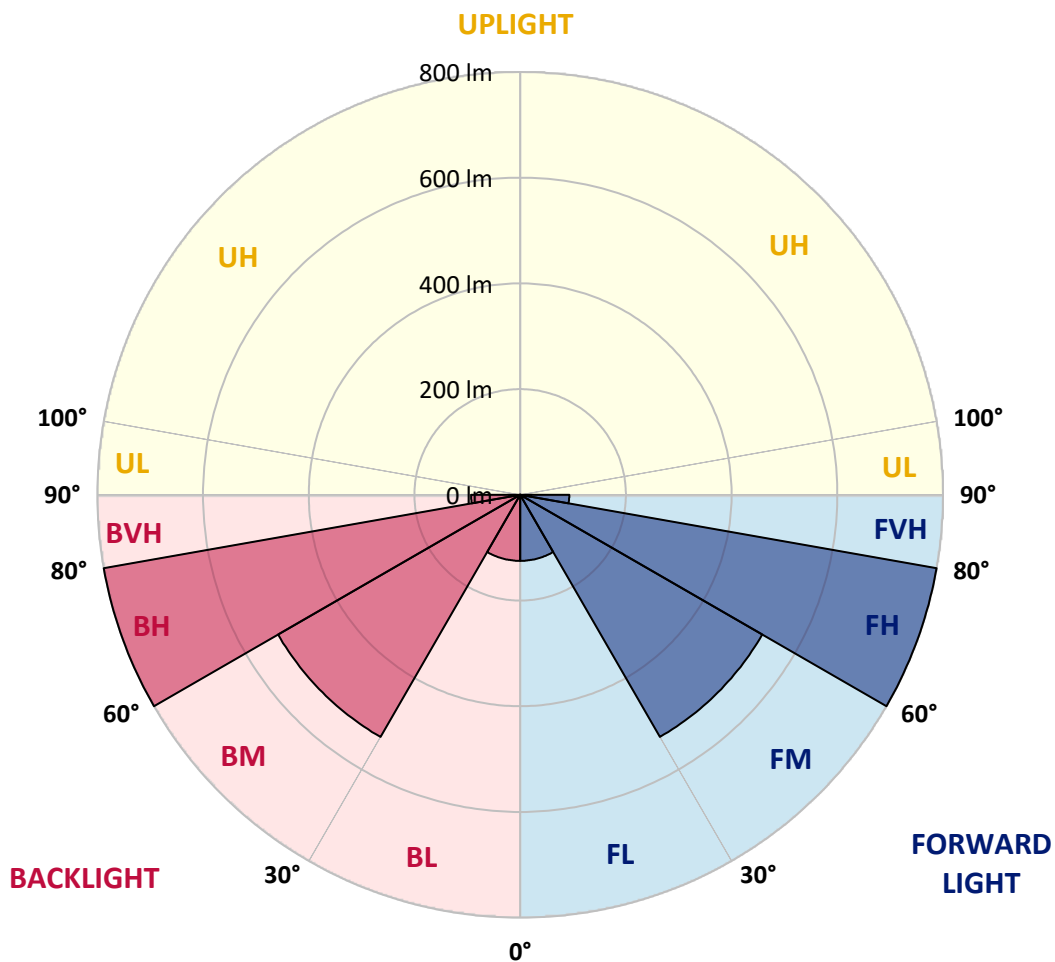
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	124.9	4.0			
FM	(30°-60°)	528.7	17.1			
FH	(60°-80°)	799.6	25.9			G1/1800
FVH	(80°-90°)	92.9	3.0			G1/100
BL	(0°-30°)	124.9	4.0	B1/500		
BM	(30°-60°)	528.7	17.1	B1/1000		
BH	(60°-80°)	799.6	25.9	B2/1000		G1/1800
BVH	(80°-90°)	92.9	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°	292.0	292.0	292.0	292.0	292.0	292.0	292.0	292.0	292.0	292.0	292.0
2.5°	292.6	292.5	292.3	292.1	292.0	291.9	291.9	291.9	291.8	291.8	291.8
5°	292.6	292.5	292.3	292.2	292.0	291.9	291.9	291.9	291.8	291.8	291.9
7.5°	292.2	292.3	292.2	292.0	292.0	291.9	291.8	291.8	291.7	291.6	291.6
10°	292.3	292.7	292.4	292.1	292.0	291.9	291.7	291.5	291.5	291.4	291.3
12.5°	292.5	292.9	292.5	292.2	292.0	291.9	291.7	291.5	291.4	291.2	291.0
15°	293.1	293.4	293.1	292.8	292.5	292.2	292.0	291.8	291.5	291.2	291.0
17.5°	293.5	294.0	293.6	293.3	293.0	292.6	292.4	292.2	292.0	291.8	291.5
20°	294.2	294.7	294.4	294.1	293.9	293.7	293.6	293.4	293.2	293.1	292.8
22.5°	295.5	295.9	295.8	295.7	295.8	295.8	295.8	295.9	295.8	295.7	295.4
25°	298.2	298.2	298.4	298.6	298.9	299.2	299.4	299.7	299.8	300.0	299.5
27.5°	302.9	303.3	303.5	303.6	304.1	304.6	305.2	305.7	306.0	306.3	305.8
30°	309.0	309.0	309.4	309.7	310.6	311.4	312.1	312.8	313.4	313.9	313.6
32.5°	316.8	317.3	317.8	318.3	319.4	320.4	321.6	322.8	323.5	324.2	323.6
35°	328.7	329.3	329.8	330.3	331.4	332.5	333.8	335.2	335.8	336.4	336.0
37.5°	345.5	345.5	346.2	346.9	347.6	348.3	350.1	351.9	352.6	353.4	352.8
40°	368.2	368.3	368.4	368.6	369.2	369.9	372.1	374.3	375.6	376.9	375.6
42.5°	394.3	395.4	395.4	395.3	395.8	396.2	398.3	400.4	402.2	404.1	403.4
45°	425.1	424.9	424.5	424.1	425.4	426.8	429.8	432.8	434.4	436.1	434.6
47.5°	456.2	455.9	455.4	454.8	456.2	457.5	462.0	466.5	468.8	471.2	468.7
50°	487.2	488.4	487.7	487.0	489.0	491.0	496.7	502.4	505.8	509.3	506.4
52.5°	521.5	522.4	521.6	520.8	523.6	526.3	533.1	539.8	544.4	549.0	545.1
55°	557.0	555.9	556.4	556.8	559.4	562.0	570.3	578.6	584.1	589.6	585.2
57.5°	590.2	590.6	590.2	589.7	593.8	597.9	608.4	618.8	625.7	632.6	627.1
60°	624.2	624.3	623.3	622.3	626.8	631.2	646.2	661.2	670.2	679.1	671.6
62.5°	662.2	662.1	660.4	658.6	663.8	669.1	687.7	706.3	718.6	730.9	721.7
65°	708.8	707.6	706.6	705.6	711.6	717.7	740.8	763.9	780.5	797.1	785.2
67.5°	777.5	776.6	774.5	772.4	779.2	785.9	815.5	845.1	866.6	888.0	872.4
70°	853.1	851.4	852.8	854.3	869.9	885.5	925.2	964.9	990.3	1015.7	989.4
72°	815.8	816.5	821.4	826.2	853.6	880.9	937.3	993.7	1030.4	1067.2	1026.6
72.5°	802.8	803.4	808.9	814.4	840.5	866.6	924.8	982.9	1021.0	1059.0	1017.2
75°	747.6	749.2	755.6	761.9	788.4	814.8	873.4	932.1	968.6	1005.0	963.2
77.5°	657.5	662.5	668.9	675.4	706.9	738.4	804.7	871.0	911.2	951.5	904.0
80°	501.8	500.0	511.1	522.2	552.3	582.4	633.7	685.0	731.4	777.7	724.3
82.5°	195.0	199.3	222.3	245.3	276.8	308.4	354.4	400.3	442.0	483.8	439.4
85°	20.1	22.9	31.2	39.4	56.6	73.8	101.8	129.8	157.2	184.7	154.9
87.5°	8.1	8.9	11.4	14.0	14.6	15.3	18.5	21.7	21.6	21.4	21.1
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°	292.0	292.0	292.0	292.0	292.0	292.0	292.0	292.0
2.5°	291.9	292.0	292.1	292.1	292.1	292.2	292.4	292.2
5°	292.0	292.0	292.1	292.1	292.1	292.2	292.4	292.2
7.5°	291.7	291.7	291.7	291.8	292.0	292.0	292.1	292.0
10°	291.2	291.2	291.3	291.4	291.6	291.8	291.9	292.0
12.5°	290.9	291.0	291.0	291.2	291.3	291.4	291.6	291.8
15°	290.9	291.0	291.0	291.1	291.2	291.4	291.6	291.8
17.5°	291.3	291.2	291.1	291.2	291.3	291.5	291.8	292.0
20°	292.4	292.2	292.1	292.1	292.1	292.4	292.6	292.6
22.5°	295.0	294.5	294.0	293.9	293.8	293.8	293.9	294.0
25°	299.1	298.3	297.5	297.2	297.0	296.9	296.8	297.0
27.5°	305.4	304.5	303.6	303.0	302.5	302.2	301.9	302.0
30°	313.2	312.2	311.1	310.2	309.3	308.9	308.5	308.6
32.5°	323.1	321.8	320.6	319.4	318.2	317.7	317.1	317.2
35°	335.7	334.2	332.8	331.8	330.8	330.0	329.1	329.8
37.5°	352.2	350.8	349.5	348.8	348.2	347.4	346.7	346.8
40°	374.4	373.0	371.6	371.0	370.5	369.5	368.6	368.8
42.5°	402.6	400.5	398.4	397.4	396.4	396.0	395.5	395.8
45°	433.0	430.9	428.8	428.0	427.1	425.9	424.7	425.8
47.5°	466.2	463.6	460.9	459.4	457.9	458.3	458.7	457.8
50°	503.5	499.1	494.6	492.8	491.1	491.1	491.1	491.0
52.5°	541.2	535.0	528.9	527.4	525.9	525.6	525.2	524.8
55°	580.8	573.2	565.7	562.9	560.1	560.5	560.9	562.0
57.5°	621.6	611.6	601.7	598.5	595.3	595.6	595.8	597.6
60°	664.0	651.2	638.3	634.8	631.2	632.2	633.1	634.2
62.5°	712.5	697.0	681.4	676.6	671.9	673.1	674.3	677.2
65°	773.4	754.0	734.6	729.6	724.7	725.2	725.8	730.8
67.5°	856.7	830.8	805.0	800.4	795.9	796.7	797.5	805.6
70°	963.1	924.8	886.5	867.6	848.8	845.9	842.9	847.2
72°	985.9	931.8	877.7	849.9	822.1	817.8	813.4	813.8
72.5°	975.4	920.7	866.0	839.0	812.0	808.4	804.9	804.2
75°	921.3	867.8	814.3	786.4	758.5	751.8	745.0	745.0
77.5°	856.5	789.0	721.6	691.5	661.4	654.4	647.3	641.8
80°	670.9	610.4	550.0	519.4	488.9	477.6	466.3	459.6
82.5°	394.9	339.3	283.7	244.9	206.1	194.5	182.8	166.6
85°	125.1	96.2	67.4	52.6	37.8	30.6	23.3	20.4
87.5°	20.8	16.9	13.0	12.6	12.1	9.5	6.9	5.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)