

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: P143920

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P143920
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-E01-E
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE
Light Source: (21) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3065.6 lumens
Efficiency: N/A
Efficacy: 124.1 lumens/watt
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G1

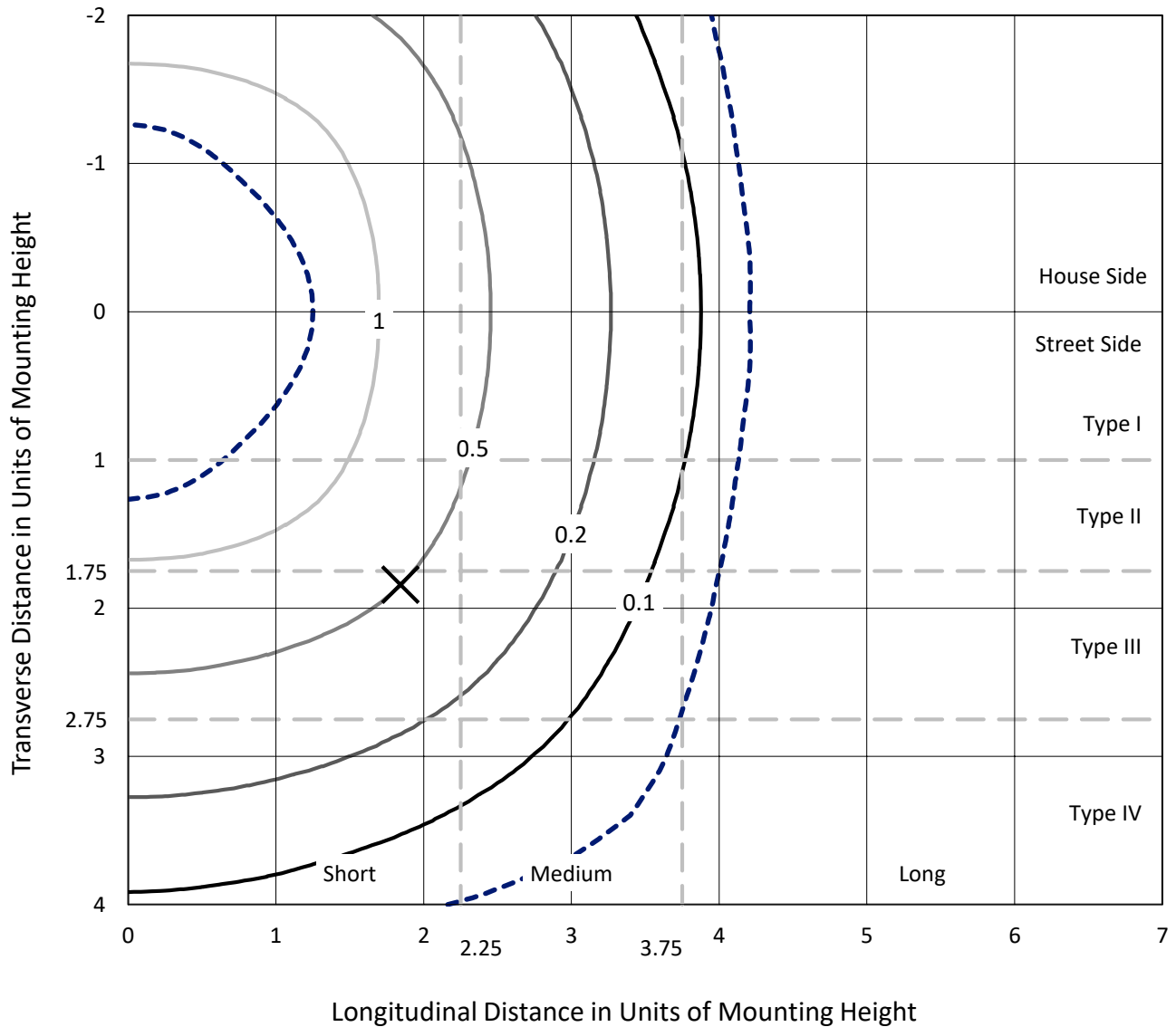
Input Watts (W): 24.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

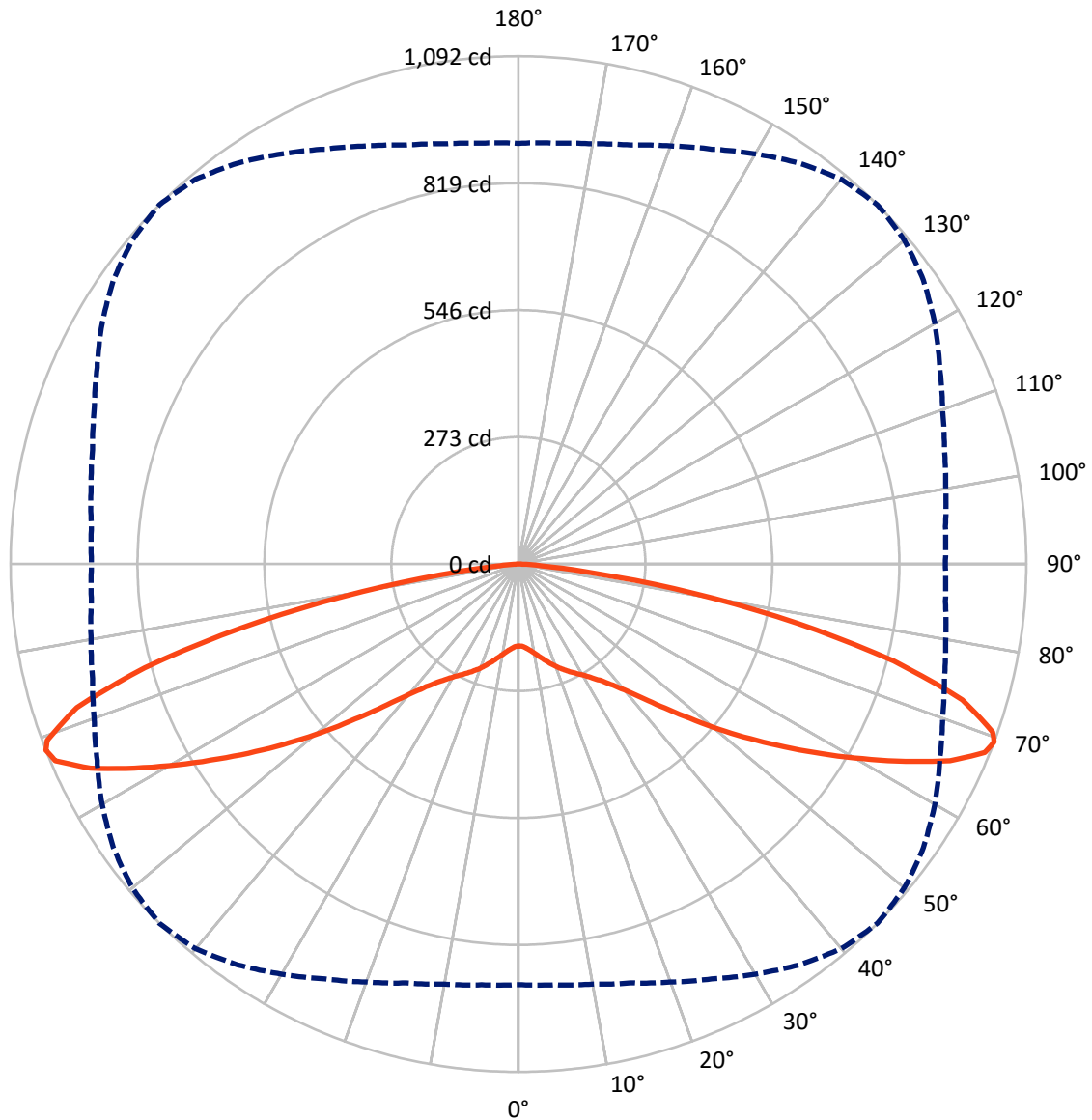
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2 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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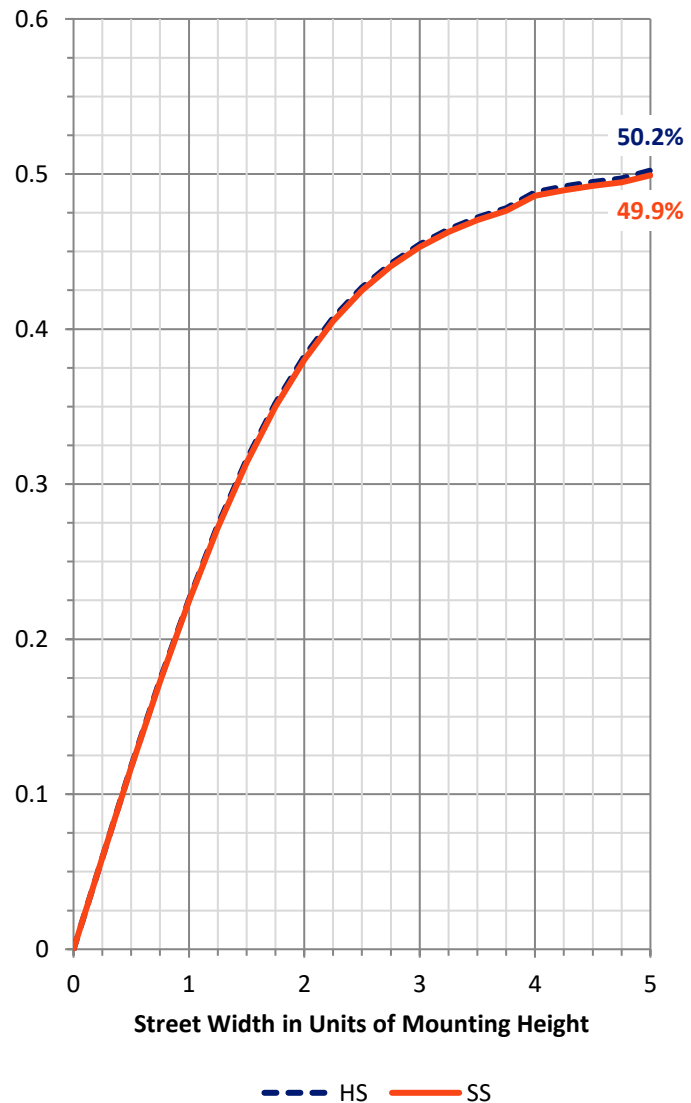
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1532.8	0.0	1532.8
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	1532.8	0.0	1532.8
	% Fixture	50.0	0.0	50.0
Total	Lumens	3065.6	0.0	3065.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.8	0.6
10°-20°	61.3	2.0
20°-30°	118.1	3.9
30°-40°	193.5	6.3
40°-50°	336.5	11.0
50°-60°	597.7	19.5
60°-70°	927.9	30.3
70°-80°	739.3	24.1
80°-90°	73.5	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°	3065.6	100.0
0°-180°	3065.6	100.0



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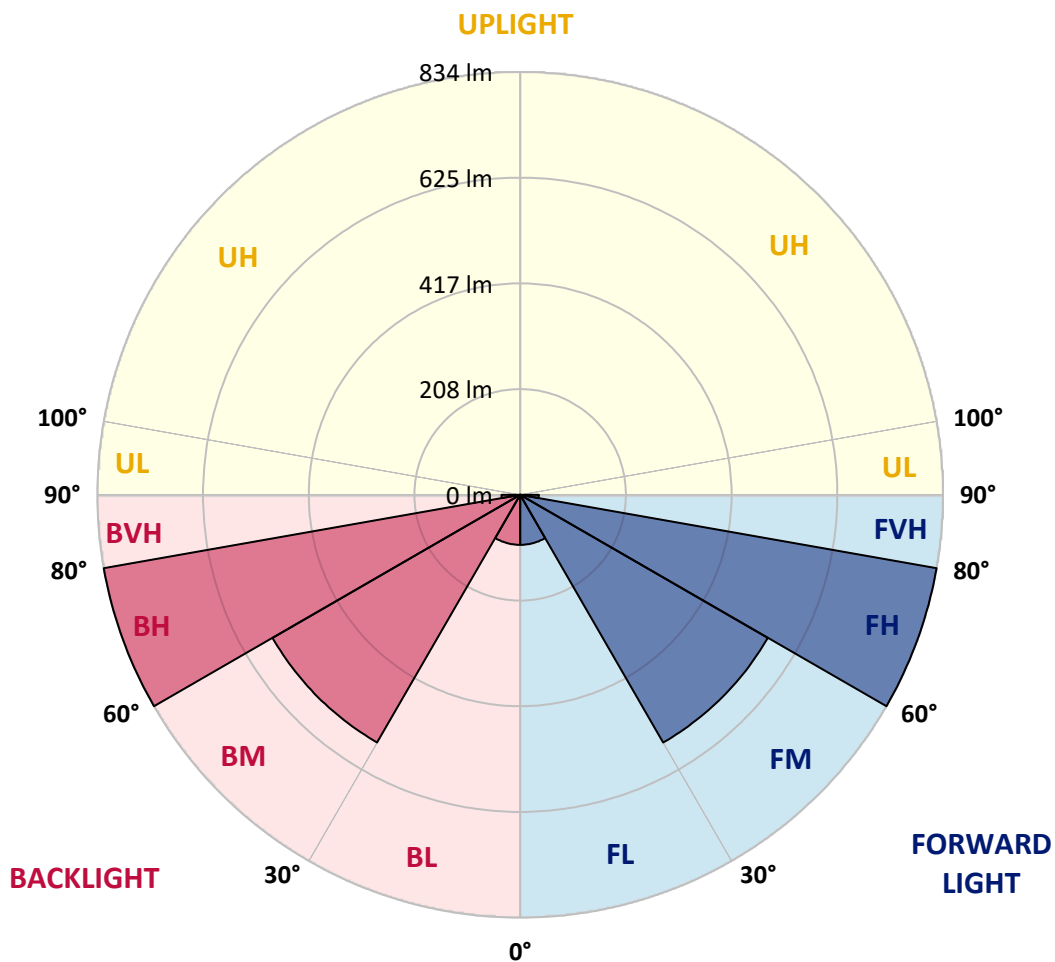
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	98.6	3.2			
FM (30°-60°)	563.8	18.4			
FH (60°-80°)	833.6	27.2			G1/1800
FVH (80°-90°)	36.8	1.2			G1/100
BL (0°-30°)	98.6	3.2	B0/110		
BM (30°-60°)	563.8	18.4	B1/1000		
BH (60°-80°)	833.6	27.2	B2/1000		G1/1800
BVH (80°-90°)	36.8	1.2			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°	176.2	176.2	176.2	176.2	176.2	176.2	176.2	176.2	176.2	176.2	176.2
2.5°	177.6	177.6	177.6	177.4	177.4	177.2	177.4	177.2	177.2	177.2	177.2
5°	182.2	181.8	181.8	181.6	182.0	182.0	181.6	181.8	181.6	181.8	181.8
7.5°	188.0	188.0	188.0	187.8	188.2	188.0	187.8	188.0	188.0	187.8	187.8
10°	195.2	195.4	195.2	195.2	195.8	195.6	195.8	195.8	196.0	195.8	195.8
12.5°	203.6	203.6	203.8	204.0	204.2	204.4	205.0	204.8	205.2	204.8	204.8
15°	213.4	213.8	213.4	213.4	214.0	214.4	214.6	214.6	215.0	214.8	214.4
17.5°	223.8	224.0	223.8	223.6	224.2	224.8	225.0	225.0	225.6	225.2	225.2
20°	234.4	234.6	234.2	234.0	234.8	234.8	235.2	235.4	236.0	236.2	235.6
22.5°	244.2	244.4	244.2	244.0	244.8	244.8	245.4	245.6	246.4	246.2	246.2
25°	253.8	253.8	253.6	253.6	254.4	254.6	255.2	255.6	256.4	256.4	256.4
27.5°	262.6	262.8	262.4	262.2	263.8	264.4	264.8	265.6	266.2	266.6	266.4
30°	272.6	272.6	272.4	273.0	274.0	274.8	275.6	276.8	278.0	277.6	277.6
32.5°	284.4	284.8	284.6	285.4	286.6	287.8	288.8	290.2	290.8	291.8	291.0
35°	300.2	301.0	300.6	301.4	302.4	303.2	305.4	306.8	307.8	308.4	308.0
37.5°	320.0	319.6	320.4	320.6	322.6	323.6	326.2	328.2	329.8	330.4	330.0
40°	344.6	344.0	345.0	346.0	348.6	349.6	352.6	355.6	357.8	358.6	358.2
42.5°	374.0	374.8	376.4	377.8	381.4	384.2	387.6	392.0	394.4	395.4	394.0
45°	412.6	411.2	414.2	417.8	419.8	426.0	431.6	436.2	440.2	441.8	440.2
47.5°	456.6	456.4	460.0	464.4	469.6	475.4	482.0	488.0	495.0	495.4	493.4
50°	505.2	509.2	511.2	515.6	525.2	532.4	540.8	549.8	556.2	558.2	554.6
52.5°	563.8	566.8	568.0	575.4	584.2	593.0	604.8	615.6	623.0	623.8	622.0
55°	627.4	629.8	632.0	641.0	650.6	658.4	673.4	684.0	691.4	694.2	693.0
57.5°	693.2	695.4	698.2	708.0	717.8	728.8	743.0	755.4	764.0	769.2	767.8
60°	766.2	766.2	772.6	782.4	790.4	803.4	818.2	832.6	842.0	850.2	848.0
62.5°	843.0	845.2	851.4	859.4	867.8	879.8	896.6	913.8	928.2	934.4	934.2
65°	901.2	905.2	913.4	922.6	936.6	950.8	972.0	993.4	1010.8	1019.8	1019.8
67.5°	918.2	920.8	931.0	945.0	965.2	987.8	1016.6	1046.4	1070.2	1082.0	1074.6
69°	904.6	908.4	917.4	932.6	956.6	984.2	1018.4	1052.2	1079.8	1092.0	1083.4
70°	888.8	893.0	902.0	917.0	941.8	971.2	1005.4	1041.8	1071.4	1081.8	1072.0
72.5°	824.4	829.6	836.0	849.0	871.4	899.0	929.8	961.8	990.2	998.4	986.2
75°	714.6	715.6	718.8	728.4	736.4	756.0	782.2	807.6	829.0	833.8	820.8
77.5°	505.8	500.4	495.0	503.2	509.6	534.8	563.2	584.0	606.4	613.2	600.0
80°	221.8	219.8	227.4	238.2	266.4	283.2	311.0	340.8	359.8	382.0	358.2
82.5°	43.8	46.2	53.4	66.0	81.4	102.4	120.6	141.2	159.8	168.2	159.6
85°	17.8	19.4	22.0	24.6	26.4	29.6	34.8	43.2	47.6	48.2	45.8
87.5°	7.4	8.6	11.6	13.8	14.0	13.4	13.8	14.2	11.6	9.4	11.8
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°	176.2	176.2	176.2	176.2	176.2	176.2	176.2	176.2
2.5°	177.2	177.4	177.2	177.4	177.2	177.2	177.4	177.2
5°	181.6	181.8	181.6	181.4	181.2	181.4	181.4	181.4
7.5°	187.8	187.6	187.4	187.4	187.2	187.0	187.4	187.4
10°	195.4	195.2	194.8	194.8	194.6	194.6	194.6	194.6
12.5°	204.6	204.0	203.8	203.2	203.0	202.8	202.8	203.0
15°	214.2	213.6	213.4	212.4	212.4	212.2	212.2	212.2
17.5°	224.4	223.8	223.0	223.0	222.4	222.0	222.2	221.8
20°	234.8	234.0	233.6	233.4	232.6	232.6	232.6	232.4
22.5°	245.0	244.4	243.8	243.0	242.2	242.0	242.0	241.8
25°	255.4	254.4	253.2	252.4	251.6	251.0	251.0	251.0
27.5°	265.8	264.6	262.8	261.8	260.6	260.0	260.0	259.8
30°	276.8	275.4	273.8	272.4	270.8	270.2	270.0	269.6
32.5°	290.0	288.6	287.0	285.0	283.4	282.4	282.4	281.8
35°	306.8	305.2	304.0	301.4	299.4	297.8	298.0	298.4
37.5°	328.8	326.8	325.8	322.6	320.0	318.4	318.4	318.2
40°	356.8	354.8	352.6	349.6	346.4	344.2	343.6	343.6
42.5°	392.4	390.6	387.6	383.4	379.6	377.2	375.2	375.4
45°	437.0	434.8	430.6	425.4	420.8	417.4	414.6	414.6
47.5°	491.2	486.6	480.8	476.2	468.4	463.2	461.2	460.8
50°	553.0	544.4	537.2	530.6	522.4	517.0	514.0	513.2
52.5°	617.8	608.8	599.8	591.2	581.2	575.6	570.8	570.4
55°	688.2	676.8	665.4	657.0	645.2	639.4	634.6	631.8
57.5°	760.0	747.2	739.0	727.0	714.6	710.4	705.8	702.4
60°	840.8	826.8	816.0	803.4	795.4	786.4	782.0	779.4
62.5°	923.4	910.4	896.6	884.6	873.4	867.2	861.2	858.2
65°	1007.4	986.0	969.6	953.0	939.8	928.6	919.2	918.0
67.5°	1059.0	1032.0	1004.6	980.4	961.0	945.2	935.6	932.2
69°	1063.2	1033.8	999.6	970.6	948.2	933.0	921.6	918.0
70°	1051.6	1022.0	986.0	954.8	931.6	915.0	905.6	899.6
72.5°	966.8	940.8	906.2	875.4	854.4	835.0	825.6	823.2
75°	797.6	770.0	738.2	723.4	708.8	696.6	690.2	689.6
77.5°	566.4	538.2	514.0	494.6	478.8	471.0	472.8	466.2
80°	324.2	287.4	258.2	241.0	217.6	203.6	187.8	199.2
82.5°	139.4	112.6	85.8	69.8	53.2	42.2	34.8	32.4
85°	39.0	31.8	26.6	24.4	22.0	19.6	16.6	15.4
87.5°	13.2	12.6	11.2	11.2	10.2	8.6	6.0	5.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)