

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: P881593

Luminaire Tested: **NAV-SB1A-827-U-SL4-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881593
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-10)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-827-U-SL4-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2546 lumens
Efficiency: N/A
Efficacy: 82.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B0 - U0 - G1

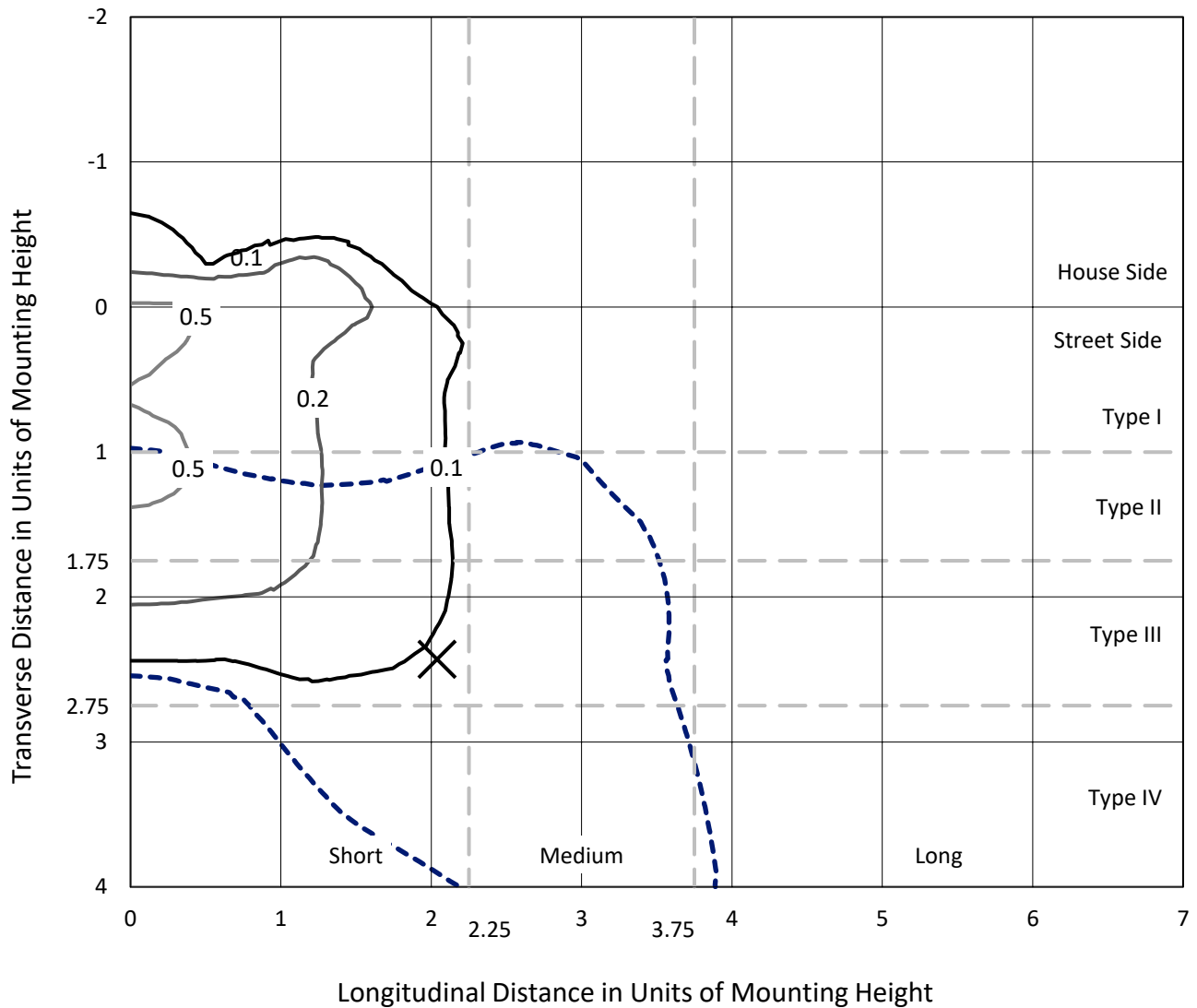
Input Watts (W): 30.9
Input Voltage (V): 120.0
Input Current (Ain): 0.263
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 6.356
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

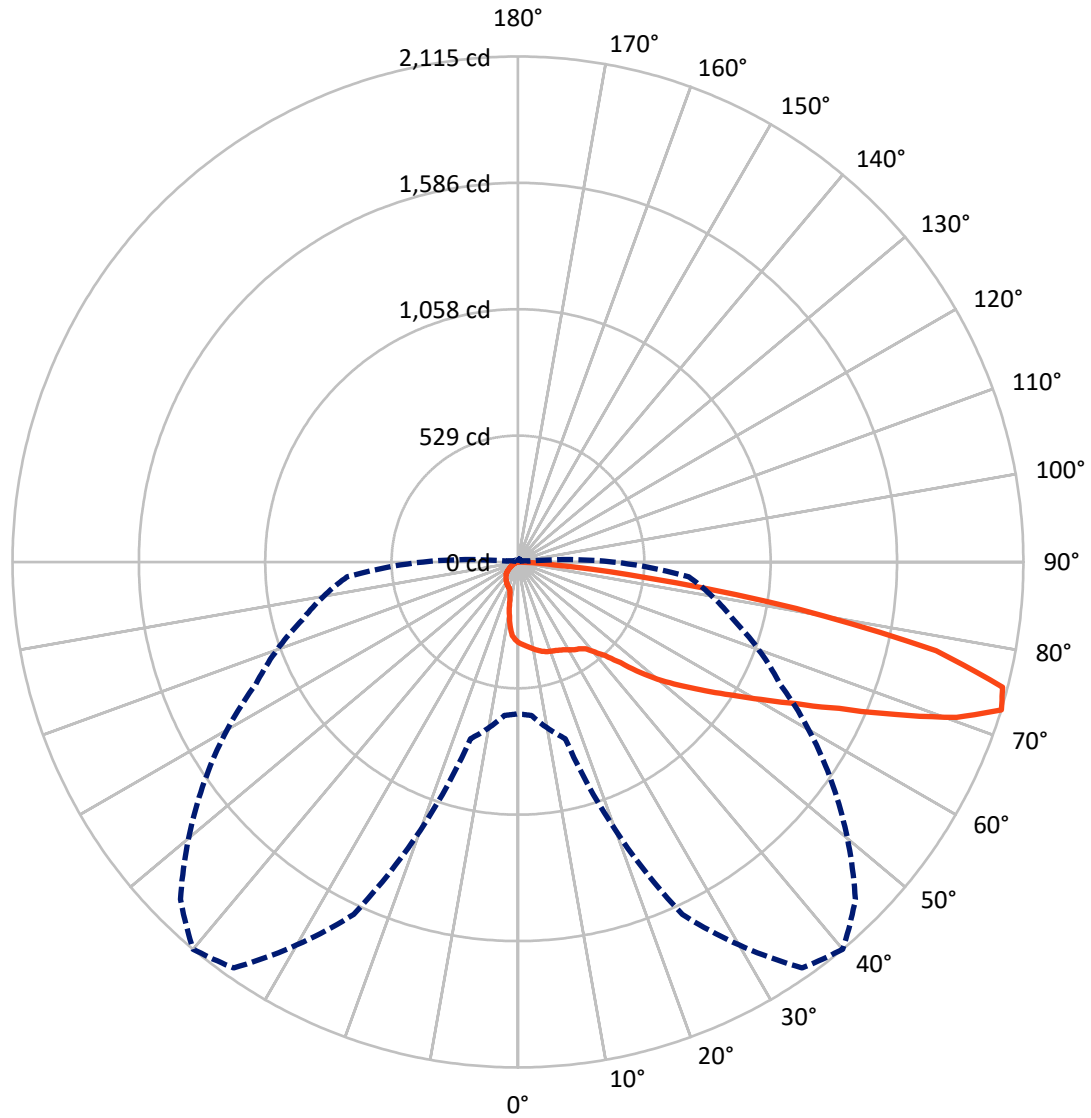
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.6 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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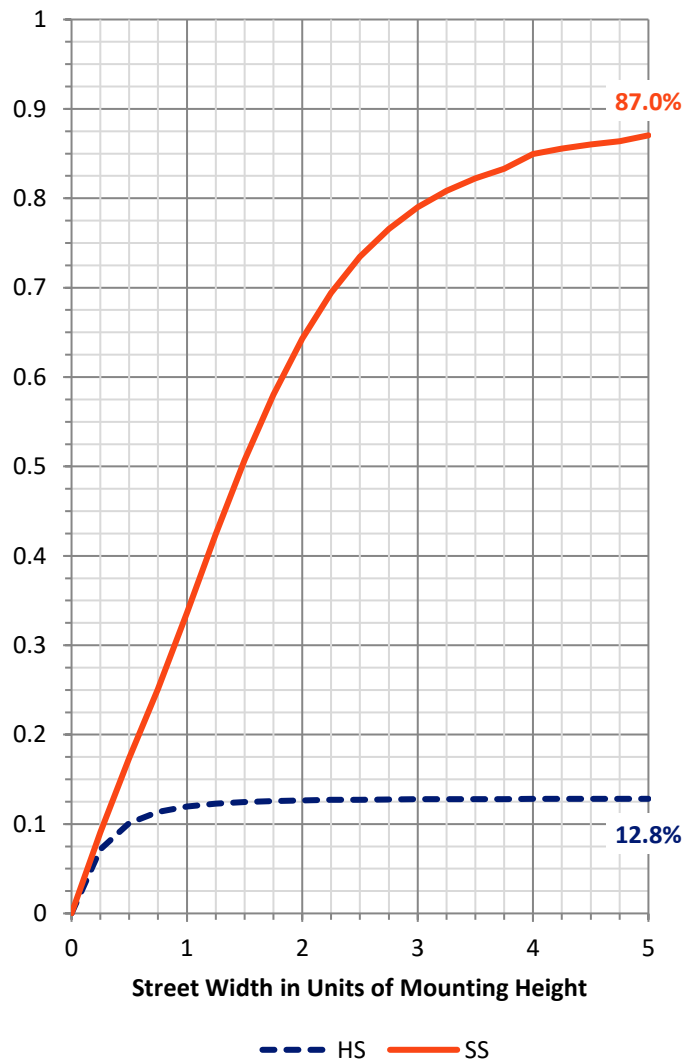
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	328.8	0.0	328.8
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	2217.2	0.0	2217.2
	% Fixture	87.1	0.0	87.1
Total	Lumens	2546.0	0.0	2546.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	30.8	1.2
10°-20°	83.6	3.3
20°-30°	135.3	5.3
30°-40°	199.7	7.8
40°-50°	336.1	13.2
50°-60°	521.9	20.5
60°-70°	653.1	25.7
70°-80°	534.7	21.0
80°-90°	50.7	2.0
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°	2546.0	100.0
0°-180°	2546.0	100.0

Coefficient of Utilization



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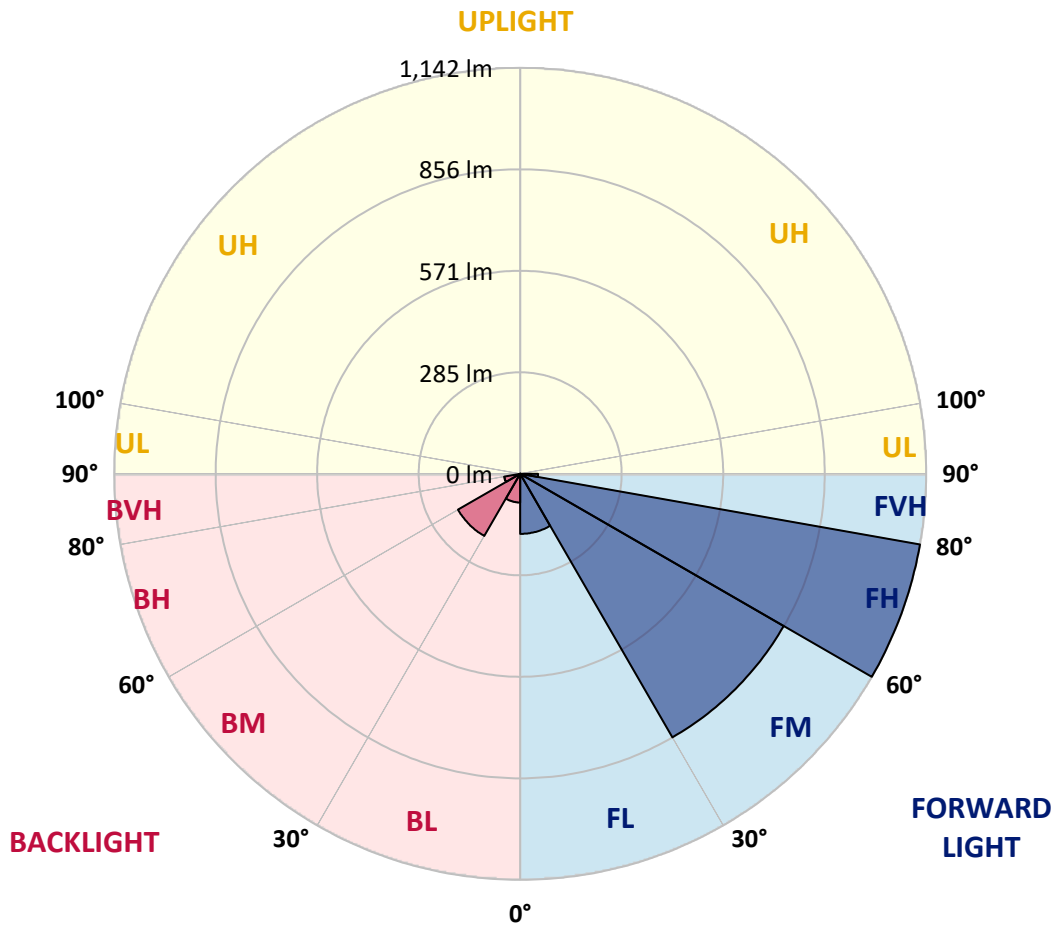
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	169.0	6.6			
FM (30°-60°)	855.9	33.6			
FH (60°-80°)	1142.0	44.9			G1/1800
FVH (80°-90°)	50.3	2.0			G1/100
BL (0°-30°)	80.7	3.2	B0/110		
BM (30°-60°)	201.9	7.9	B0/220		
BH (60°-80°)	45.8	1.8	B0/110		G0/110
BVH (80°-90°)	0.4	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	337.1	337.1	337.1	337.1	337.1	337.1	337.1	337.1	337.1	337.1	337.1
2.5°	347.3	348.6	347.8	346.3	345.9	345.2	344.2	343.8	342.5	341.3	340.0
5°	357.1	358.4	357.4	355.3	354.4	353.4	352.1	350.9	348.2	345.7	342.7
7.5°	367.8	368.9	367.8	364.7	363.2	362.0	360.1	358.4	355.3	351.7	347.8
10°	379.7	380.6	378.9	374.9	372.4	370.7	368.9	367.0	364.1	360.1	355.5
12.5°	390.8	392.0	389.3	384.5	381.6	379.9	378.0	376.4	373.5	369.7	364.9
15°	401.0	402.7	398.1	392.9	389.7	388.3	386.4	385.4	383.5	380.8	376.4
17.5°	408.6	409.8	405.0	398.9	395.2	394.3	392.9	393.5	393.1	391.8	388.9
20°	415.2	415.9	409.6	402.1	398.1	398.3	397.9	399.8	400.6	400.6	400.4
22.5°	423.2	423.4	415.3	406.0	401.2	402.5	403.1	405.2	406.7	408.3	411.7
25°	433.8	433.4	423.8	410.9	406.7	408.6	410.0	410.7	412.5	415.0	422.8
27.5°	449.5	448.3	436.1	419.0	414.0	415.7	418.2	417.8	417.1	419.0	432.2
30°	469.4	467.9	451.6	430.3	425.7	427.2	428.0	424.6	419.0	420.7	440.5
32.5°	501.1	498.4	475.8	443.0	435.9	437.6	436.6	429.5	421.3	423.0	448.7
35°	556.1	549.6	517.6	469.4	447.4	445.5	443.2	436.3	426.1	424.4	455.6
37.5°	673.1	661.6	606.9	521.0	473.5	461.0	453.9	447.0	431.3	424.4	463.5
40°	805.0	793.3	730.2	607.3	516.8	495.7	478.8	459.6	436.6	426.9	475.8
42.5°	942.7	929.8	865.0	714.3	578.7	535.4	503.9	469.8	445.5	434.5	492.1
45°	1096.5	1080.4	995.6	825.9	668.7	601.4	544.4	490.7	460.8	448.1	514.3
47.5°	1258.7	1237.8	1125.8	934.2	765.5	692.6	618.4	528.1	483.4	468.5	544.4
50°	1402.5	1381.8	1260.2	1047.6	856.0	779.5	702.8	579.9	517.4	497.2	584.9
52.5°	1505.9	1490.2	1382.6	1164.5	950.2	861.0	779.3	640.1	560.3	534.0	632.6
55°	1575.1	1560.7	1469.3	1275.4	1059.7	950.7	854.7	705.5	612.1	578.2	685.3
57.5°	1617.1	1608.9	1532.0	1374.3	1168.2	1048.9	941.0	777.4	673.1	630.1	744.2
60°	1632.1	1625.3	1570.9	1468.7	1299.4	1166.8	1042.4	858.5	747.1	689.2	804.6
62.5°	1592.2	1593.5	1598.9	1580.5	1437.6	1304.9	1164.0	955.9	829.2	756.1	861.4
65°	1404.4	1415.6	1517.6	1704.3	1620.7	1477.9	1318.7	1074.8	923.1	832.2	906.4
67.5°	1162.8	1178.9	1305.9	1776.8	1816.0	1702.4	1534.3	1226.3	1035.1	909.7	923.5
70°	890.1	907.4	1061.2	1761.7	1998.7	1947.9	1800.8	1419.0	1151.1	963.4	880.0
72.5°	635.3	644.1	765.3	1626.9	2073.7	2115.1	1997.2	1601.6	1210.4	933.7	717.8
75°	446.4	444.9	525.2	1310.1	1956.9	2094.8	1928.3	1502.8	1095.3	741.7	442.6
77.5°	194.4	194.8	262.3	795.6	1561.9	1789.1	1602.9	941.3	763.6	393.1	186.8
80°	50.4	52.0	96.3	316.8	940.4	1180.8	977.6	413.8	352.8	95.9	35.7
82.5°	17.8	19.0	44.3	99.5	346.9	541.5	435.3	132.3	92.0	27.4	9.6
85°	5.2	6.1	23.8	30.5	71.7	153.0	105.7	25.7	22.6	14.2	2.5
87.5°	0.0	0.8	4.8	4.2	4.2	2.9	5.4	2.9	3.6	1.7	0.8
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	337.1	337.1	337.1	337.1	337.1	337.1	337.1	337.1	337.1	337.1	337.1
2.5°	338.8	337.5	334.6	331.6	328.7	326.0	325.2	322.3	321.0	321.2	321.0
5°	340.6	338.1	332.5	325.8	318.9	311.0	304.5	295.3	287.4	286.5	285.9
7.5°	345.2	341.1	332.1	319.1	301.8	280.2	260.0	240.1	228.8	222.6	222.2
10°	352.3	346.9	333.1	308.2	271.5	232.8	202.3	177.2	164.3	158.4	157.2
12.5°	360.7	354.8	334.6	289.6	232.4	181.6	148.6	133.3	130.6	130.2	130.0
15°	372.6	366.1	336.3	264.4	190.0	138.3	123.1	123.3	125.4	126.6	126.4
17.5°	385.8	379.3	333.9	233.8	148.2	118.1	117.7	119.5	122.5	123.7	123.5
20°	399.2	393.1	325.0	197.7	119.8	112.6	114.1	116.0	119.1	120.6	120.6
22.5°	413.0	407.7	311.0	159.4	108.2	108.5	110.5	112.4	115.8	117.5	117.5
25°	427.8	423.2	292.4	127.7	103.2	104.3	106.8	109.1	112.8	114.9	114.9
27.5°	442.8	439.3	271.3	106.6	98.6	99.9	102.8	105.9	109.5	112.0	112.2
30°	459.1	457.2	254.5	98.8	94.2	95.3	98.6	102.0	106.0	109.1	109.5
32.5°	475.8	475.4	246.2	104.5	90.1	90.9	93.8	97.2	102.2	106.0	106.4
35°	492.2	493.0	241.4	120.8	88.8	86.7	88.6	91.7	97.6	102.4	103.2
37.5°	513.3	515.3	241.2	138.4	92.0	82.5	83.8	85.9	91.1	96.6	97.6
40°	544.8	554.9	253.5	153.6	97.8	78.6	79.0	79.4	82.1	86.7	88.2
42.5°	586.6	616.3	297.8	164.0	100.1	75.2	73.8	71.7	71.3	73.8	75.2
45°	638.6	690.5	375.7	169.7	97.8	71.3	67.7	62.1	60.0	61.7	61.7
47.5°	699.7	771.8	467.9	171.0	94.0	66.5	60.0	52.7	51.0	51.6	51.4
50°	759.4	832.8	549.0	159.9	87.6	60.4	51.6	45.4	44.3	44.5	44.5
52.5°	812.1	853.7	572.0	133.7	79.2	52.9	44.3	40.1	39.3	39.3	39.1
55°	847.0	831.1	510.1	102.2	68.6	45.3	38.0	35.9	35.5	35.3	34.9
57.5°	854.3	757.4	385.2	73.8	53.7	38.2	33.7	32.6	31.8	31.1	30.7
60°	828.2	634.7	245.3	51.6	40.3	32.6	29.9	29.1	27.6	26.1	25.5
62.5°	771.8	479.4	135.8	35.9	32.4	27.8	26.5	25.5	22.6	20.1	19.4
65°	696.1	318.7	60.0	28.0	26.5	23.4	22.6	21.3	17.8	15.0	14.4
67.5°	620.0	183.5	27.0	22.4	21.3	19.2	18.6	17.6	15.1	12.5	12.1
70°	533.1	93.0	18.6	17.8	16.5	14.6	15.1	15.0	12.5	10.2	9.8
72.5°	396.9	46.2	14.0	13.4	11.9	10.4	12.5	12.3	9.8	7.7	7.3
75°	224.7	22.8	10.2	9.4	7.1	7.7	10.0	9.4	6.7	5.0	4.6
77.5°	89.2	11.7	6.7	5.8	4.2	5.2	7.3	6.3	3.5	2.1	1.9
80°	20.5	5.8	3.5	2.5	1.9	3.1	3.8	2.3	1.0	0.2	0.0
82.5°	5.8	2.5	1.2	1.0	1.0	1.2	1.0	0.4	0.0	0.0	0.0
85°	1.9	1.2	0.4	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0
87.5°	0.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)