

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: P881523

Luminaire Tested: **NAV-SB1A-722-U-SL4-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881523
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-722-U-SL4-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2200K, 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: 2497 lumens
Efficiency: N/A
Efficacy: 80.8 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

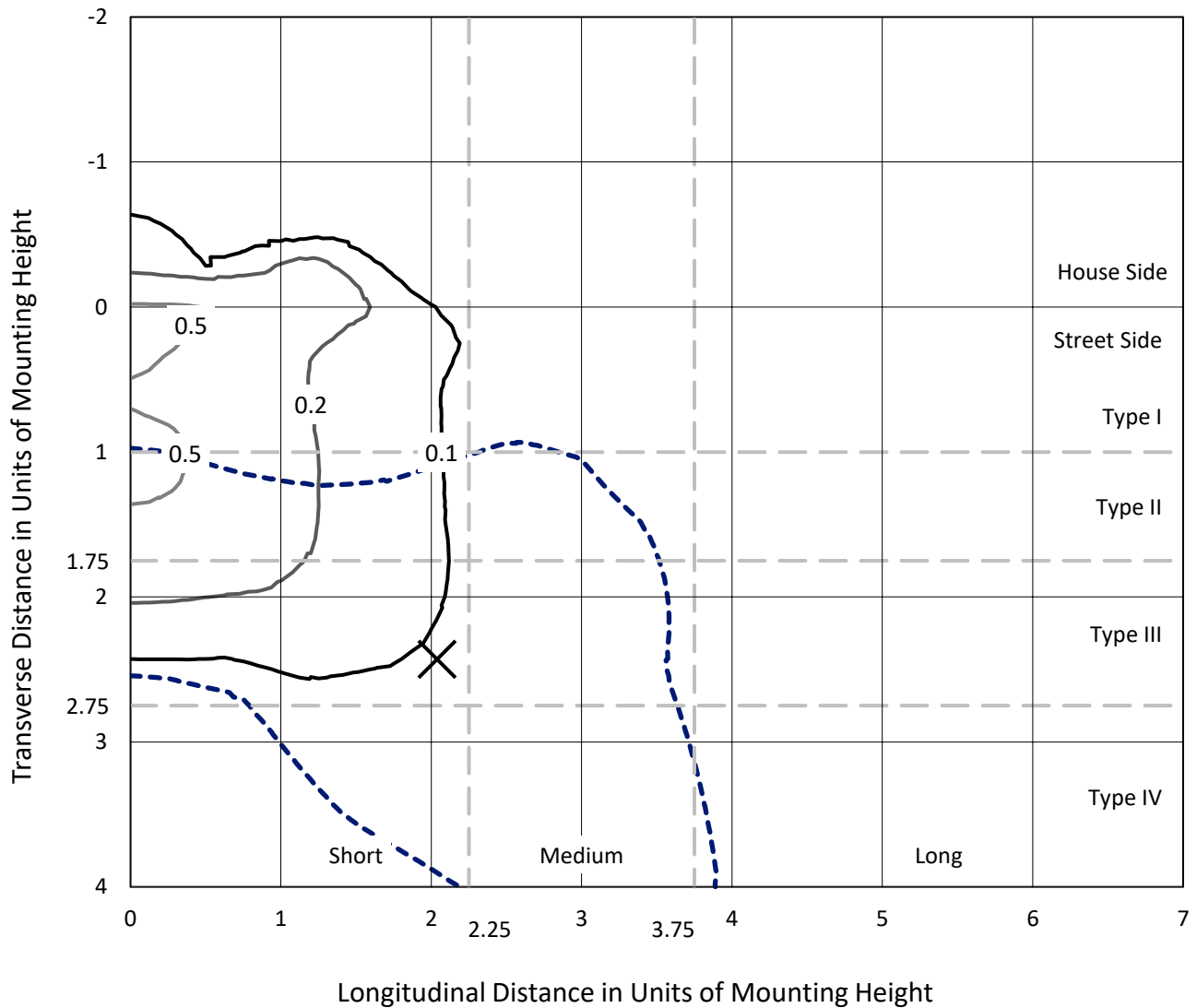
Input Watts (W): 30.9
Input Voltage (V): 120.0
Input Current (Ain): 0.263
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 6.356
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

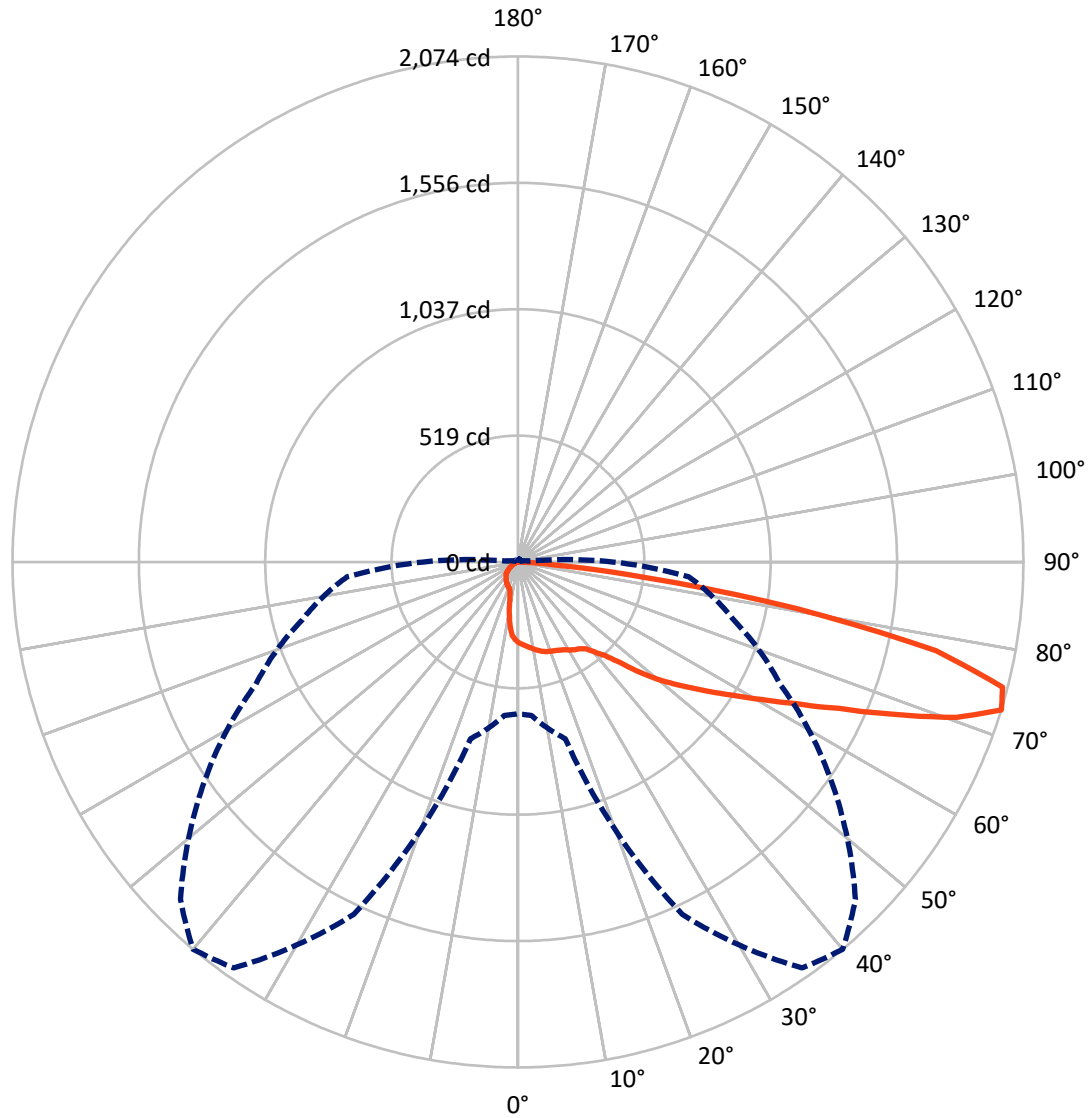
✕ Max cd
 - - - 1/2 Max cd



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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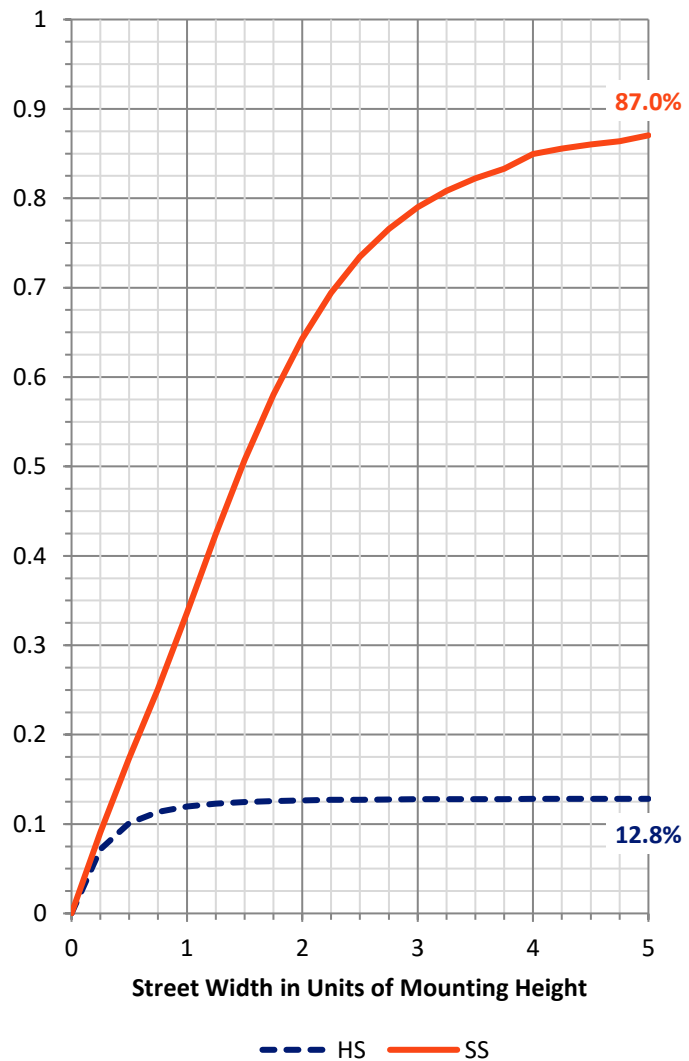
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	322.5	0.0	322.5
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	2174.5	0.0	2174.5
	% Fixture	87.1	0.0	87.1
Total	Lumens	2497.0	0.0	2497.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	30.2	1.2
10°-20°	82.0	3.3
20°-30°	132.7	5.3
30°-40°	195.9	7.8
40°-50°	329.7	13.2
50°-60°	511.9	20.5
60°-70°	640.5	25.7
70°-80°	524.4	21.0
80°-90°	49.7	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°	2497.0	100.0
0°-180°	2497.0	100.0

Coefficient of Utilization



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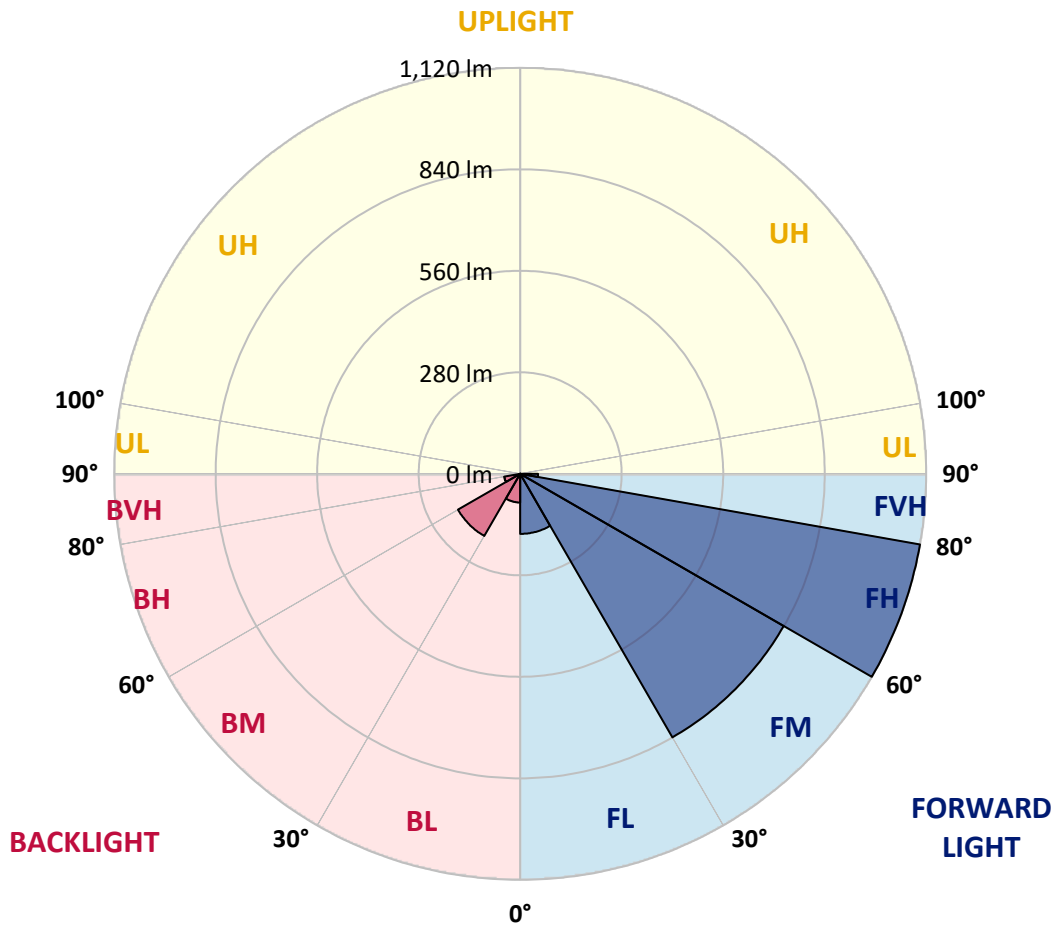
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	165.7	6.6			
FM (30°-60°)	839.4	33.6			
FH (60°-80°)	1120.0	44.9			G1/1800
FVH (80°-90°)	49.3	2.0			G1/100
BL (0°-30°)	79.1	3.2	B0/110		
BM (30°-60°)	198.0	7.9	B0/220		
BH (60°-80°)	44.9	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°	330.6	330.6	330.6	330.6	330.6	330.6	330.6	330.6	330.6	330.6	330.6
2.5°	340.6	341.9	341.2	339.7	339.3	338.5	337.6	337.2	335.9	334.8	333.4
5°	350.2	351.5	350.6	348.5	347.5	346.6	345.3	344.2	341.5	339.1	336.1
7.5°	360.7	361.8	360.7	357.7	356.2	355.1	353.2	351.5	348.5	344.9	341.2
10°	372.4	373.3	371.6	367.7	365.2	363.5	361.8	360.0	357.1	353.2	348.7
12.5°	383.3	384.4	381.8	377.1	374.3	372.6	370.7	369.2	366.4	362.6	357.9
15°	393.2	394.9	390.4	385.4	382.2	380.8	379.0	378.0	376.1	373.5	369.2
17.5°	400.8	401.9	397.2	391.2	387.6	386.7	385.4	385.9	385.5	384.2	381.4
20°	407.2	407.9	401.7	394.4	390.4	390.6	390.2	392.1	392.9	392.9	392.7
22.5°	415.1	415.3	407.4	398.1	393.4	394.8	395.3	397.4	398.9	400.4	403.8
25°	425.4	425.0	415.6	403.0	398.9	400.8	402.1	402.8	404.5	407.0	414.7
27.5°	440.8	439.7	427.7	410.9	406.0	407.7	410.2	409.8	409.0	410.9	423.9
30°	460.4	458.9	442.9	422.0	417.5	419.0	419.8	416.4	410.9	412.6	432.0
32.5°	491.4	488.8	466.6	434.4	427.5	429.2	428.2	421.3	413.2	414.9	440.1
35°	545.4	539.0	507.6	460.4	438.8	436.9	434.6	427.9	417.9	416.2	446.8
37.5°	660.1	648.8	595.2	511.0	464.3	452.1	445.2	438.4	423.0	416.2	454.6
40°	789.5	778.0	716.2	595.6	506.8	486.2	469.6	450.8	428.2	418.6	466.6
42.5°	924.5	911.9	848.4	700.6	567.6	525.1	494.2	460.8	436.9	426.2	482.6
45°	1075.4	1059.6	976.4	810.0	655.8	589.8	533.9	481.3	451.9	439.5	504.4
47.5°	1234.5	1214.0	1104.1	916.3	750.8	679.3	606.5	517.9	474.1	459.4	533.9
50°	1375.5	1355.2	1236.0	1027.4	839.5	764.5	689.3	568.7	507.4	487.7	573.6
52.5°	1476.9	1461.5	1356.0	1142.1	931.9	844.4	764.3	627.8	549.5	523.8	620.4
55°	1544.8	1530.7	1441.0	1250.8	1039.3	932.4	838.2	691.9	600.3	567.0	672.2
57.5°	1586.0	1577.9	1502.5	1347.9	1145.7	1028.7	922.8	762.4	660.1	618.0	729.9
60°	1600.6	1594.1	1540.7	1440.4	1274.3	1144.4	1022.3	842.0	732.7	675.9	789.1
62.5°	1561.5	1562.8	1568.1	1550.1	1409.9	1279.8	1141.6	937.5	813.2	741.6	844.8
65°	1377.4	1388.3	1488.4	1671.5	1589.5	1449.4	1293.3	1054.1	905.4	816.2	889.0
67.5°	1140.4	1156.2	1280.7	1742.6	1781.0	1669.7	1504.7	1202.7	1015.2	892.2	905.7
70°	873.0	889.9	1040.8	1727.8	1960.2	1910.4	1766.1	1391.7	1129.0	944.9	863.0
72.5°	623.1	631.7	750.6	1595.6	2033.8	2074.4	1958.7	1570.7	1187.1	915.7	703.9
75°	437.8	436.3	515.1	1284.9	1919.2	2054.5	1891.2	1473.9	1074.2	727.4	434.1
77.5°	190.7	191.1	257.3	780.3	1531.8	1754.7	1572.1	923.2	748.9	385.5	183.2
80°	49.5	51.0	94.4	310.7	922.3	1158.1	958.8	405.9	346.0	94.0	35.0
82.5°	17.5	18.6	43.4	97.6	340.2	531.1	426.9	129.8	90.3	26.9	9.4
85°	5.1	6.0	23.3	29.9	70.3	150.1	103.6	25.2	22.2	13.9	2.4
87.5°	0.0	0.8	4.7	4.1	4.1	2.8	5.3	2.8	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°	330.6	330.6	330.6	330.6	330.6	330.6	330.6	330.6	330.6	330.6	330.6
2.5°	332.3	331.0	328.2	325.2	322.3	319.7	319.0	316.1	314.8	315.0	314.8
5°	334.0	331.6	326.1	319.5	312.8	305.0	298.7	289.6	281.9	281.0	280.4
7.5°	338.5	334.6	325.7	312.9	296.0	274.8	255.0	235.5	224.4	218.3	218.0
10°	345.5	340.2	326.7	302.2	266.3	228.3	198.4	173.8	161.2	155.3	154.2
12.5°	353.8	347.9	328.2	284.0	227.9	178.1	145.8	130.7	128.1	127.7	127.5
15°	365.4	359.0	329.9	259.3	186.4	135.6	120.7	120.9	123.0	124.1	123.9
17.5°	378.4	372.0	327.4	229.3	145.4	115.8	115.5	117.2	120.2	121.3	121.1
20°	391.6	385.5	318.8	193.9	117.5	110.4	111.9	113.8	116.8	118.3	118.3
22.5°	405.1	399.8	305.0	156.3	106.1	106.4	108.3	110.2	113.6	115.3	115.3
25°	419.6	415.1	286.8	125.3	101.2	102.3	104.8	107.0	110.6	112.7	112.7
27.5°	434.2	430.9	266.1	104.6	96.7	98.0	100.8	103.8	107.4	109.8	110.0
30°	450.2	448.4	249.6	96.9	92.3	93.5	96.7	100.1	104.0	107.0	107.4
32.5°	466.6	466.2	241.5	102.5	88.4	89.1	92.0	95.4	100.2	104.0	104.4
35°	482.8	483.5	236.8	118.5	87.1	85.0	86.9	89.9	95.7	100.4	101.2
37.5°	503.5	505.3	236.6	135.8	90.3	80.9	82.2	84.3	89.3	94.8	95.7
40°	534.3	544.3	248.6	150.6	95.9	77.1	77.5	77.9	80.5	85.0	86.5
42.5°	575.3	604.4	292.1	160.8	98.2	73.7	72.4	70.3	70.0	72.4	73.7
45°	626.3	677.2	368.4	166.4	95.9	70.0	66.4	60.9	58.9	60.6	60.6
47.5°	686.3	757.0	458.9	167.8	92.2	65.3	58.9	51.7	50.0	50.6	50.4
50°	744.7	816.8	538.4	156.8	85.9	59.2	50.6	44.6	43.4	43.6	43.6
52.5°	796.5	837.3	561.0	131.1	77.7	51.9	43.4	39.3	38.6	38.6	38.4
55°	830.7	815.1	500.3	100.2	67.3	44.4	37.2	35.2	34.8	34.6	34.2
57.5°	837.8	742.9	377.8	72.4	52.7	37.4	33.1	32.0	31.2	30.5	30.1
60°	812.3	622.5	240.5	50.6	39.5	32.0	29.3	28.6	27.1	25.6	25.0
62.5°	757.0	470.2	133.2	35.2	31.8	27.3	26.0	25.0	22.2	19.7	19.0
65°	682.7	312.6	58.9	27.5	26.0	22.9	22.2	20.9	17.5	14.7	14.1
67.5°	608.0	180.0	26.5	22.0	20.9	18.8	18.2	17.3	14.9	12.2	11.8
70°	522.8	91.2	18.2	17.5	16.2	14.3	14.9	14.7	12.2	10.0	9.6
72.5°	389.3	45.3	13.7	13.2	11.7	10.2	12.2	12.0	9.6	7.5	7.1
75°	220.4	22.4	10.0	9.2	7.0	7.5	9.8	9.2	6.6	4.9	4.5
77.5°	87.5	11.5	6.6	5.6	4.1	5.1	7.1	6.2	3.4	2.1	1.9
80°	20.1	5.6	3.4	2.4	1.9	3.0	3.8	2.3	0.9	0.2	0.0
82.5°	5.6	2.4	1.1	0.9	0.9	1.1	0.9	0.4	0.0	0.0	0.0
85°	1.9	1.1	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)