

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: P960020

Luminaire Tested: **NAV-SB1B-835-U-T4FT-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960020
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-835-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3500K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD
THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4054.9 lumens
Efficiency: N/A
Efficacy: 101.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

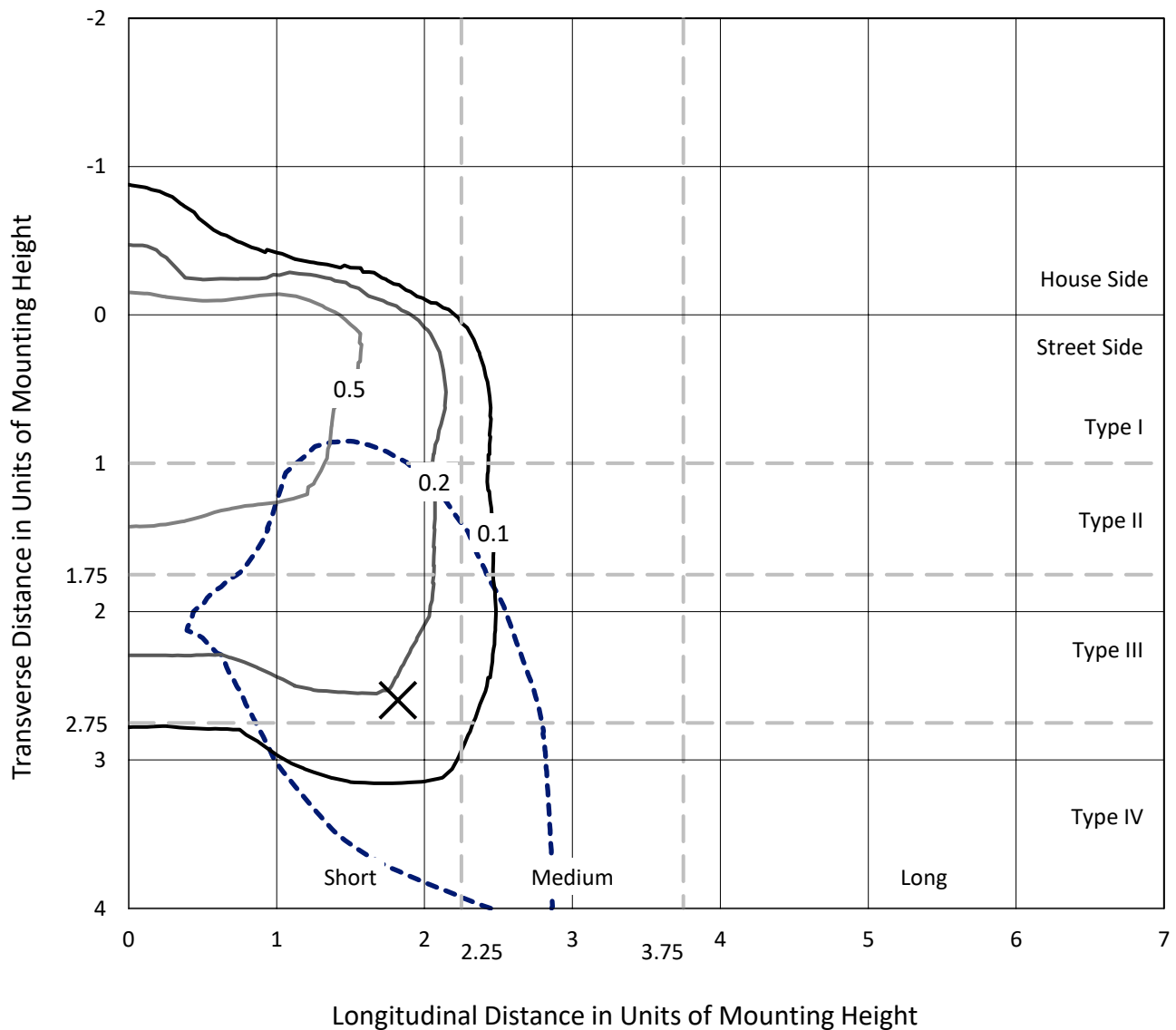
Input Watts (W): 39.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

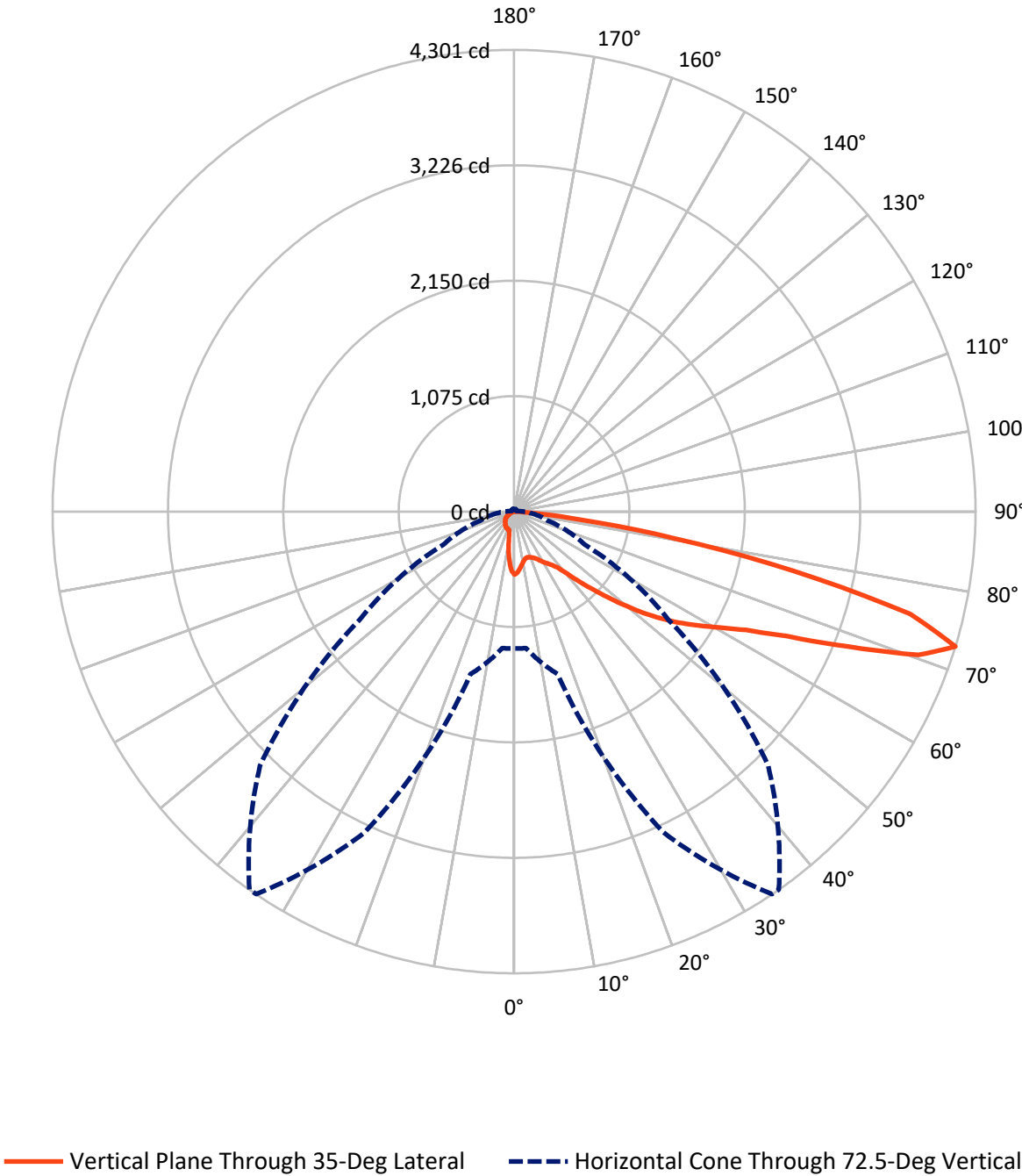
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.9 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	456.4	0.0	456.4
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	3598.5	0.0	3598.5
	% Fixture	88.7	0.0	88.7
Total	Lumens	4054.9	0.0	4054.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.3	1.2
10°-20°	113.0	2.8
20°-30°	183.5	4.5
30°-40°	306.2	7.6
40°-50°	579.3	14.3
50°-60°	920.6	22.7
60°-70°	1138.8	28.1
70°-80°	707.9	17.5
80°-90°	57.2	1.4
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°	4054.9	100.0
0°-180°	4054.9	100.0

Coefficient of Utilization



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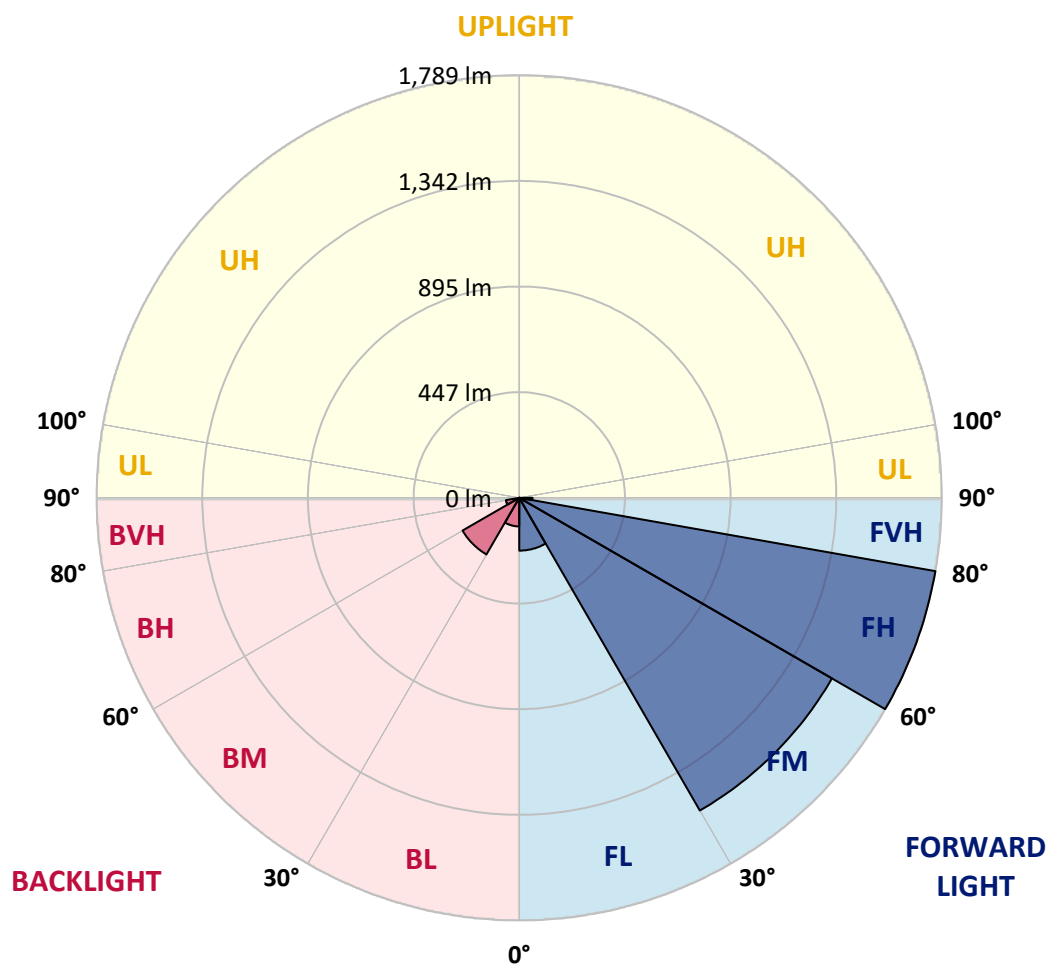
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	223.5	5.5			
FM	(30°-60°)	1529.1	37.7			
FH	(60°-80°)	1789.5	44.1			G1/1800
FVH	(80°-90°)	56.4	1.4			G1/100
BL	(0°-30°)	121.3	3.0	B1/500		
BM	(30°-60°)	277.0	6.8	B1/1000		
BH	(60°-80°)	57.3	1.4	B0/110		G0/110
BVH	(80°-90°)	0.8	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	587.7	587.7	587.7	587.7	587.7	587.7	587.7	587.7	587.7	587.7	587.7
2.5°	561.5	566.3	567.2	568.7	568.7	570.4	573.4	577.6	584.5	587.9	590.4
5°	517.5	521.1	525.6	529.2	536.0	536.9	548.5	559.8	575.5	587.4	595.7
7.5°	473.3	477.4	483.4	492.0	500.9	503.6	521.1	540.2	565.1	587.4	601.4
10°	442.1	442.4	447.7	456.3	470.6	473.9	495.3	522.3	553.5	583.8	606.7
12.5°	424.6	426.6	429.1	435.5	449.3	451.3	474.2	505.9	541.9	581.8	612.9
15°	424.6	426.1	427.5	430.8	441.8	443.6	463.8	495.6	536.0	582.6	623.1
17.5°	429.1	431.4	430.2	434.1	445.7	446.9	464.7	492.6	535.7	588.2	638.5
20°	439.7	441.5	439.1	441.5	453.0	455.5	473.9	498.3	540.8	598.1	657.8
22.5°	456.6	457.6	451.9	453.7	465.6	468.5	489.9	514.3	552.9	613.9	683.7
25°	478.1	479.8	471.2	473.3	484.6	488.2	512.8	538.3	572.3	635.5	716.7
27.5°	502.8	503.6	496.2	495.9	510.4	515.5	540.5	568.1	598.1	662.9	758.2
30°	530.9	533.6	526.4	525.3	543.8	547.9	572.6	604.6	636.1	703.9	817.3
32.5°	553.2	555.3	551.1	554.1	572.9	576.2	611.4	656.3	695.9	762.1	897.9
35°	585.3	586.5	577.0	582.3	603.7	612.0	664.6	728.8	771.0	835.2	1003.1
37.5°	701.5	701.5	661.1	634.7	655.2	662.6	737.5	820.0	863.7	933.3	1135.6
40°	862.2	859.6	800.4	746.3	743.6	758.2	841.1	935.0	983.5	1050.9	1284.7
42.5°	1033.6	1029.5	948.9	895.5	886.6	891.6	960.8	1076.8	1126.1	1194.4	1445.1
45°	1185.8	1184.6	1110.9	1039.0	1023.0	1039.0	1110.3	1242.5	1277.9	1349.8	1605.4
47.5°	1313.2	1313.2	1259.4	1212.5	1204.2	1213.7	1312.6	1426.5	1423.2	1515.3	1761.3
50°	1460.0	1458.8	1407.7	1387.5	1396.2	1409.5	1545.6	1620.1	1573.5	1677.8	1900.7
52.5°	1562.8	1570.0	1552.5	1549.2	1593.2	1616.3	1782.1	1809.7	1708.1	1832.0	2004.9
55°	1644.2	1652.5	1672.8	1695.7	1780.3	1810.6	2011.2	1989.4	1820.7	1965.7	2065.0
57.5°	1759.5	1747.6	1778.8	1824.0	1960.9	1997.5	2233.1	2159.2	1911.3	2074.2	2071.5
60°	1899.4	1901.3	1906.6	1963.6	2141.3	2188.3	2451.8	2319.6	1969.5	2140.7	1999.0
62.5°	2067.6	2070.3	2081.3	2168.9	2383.4	2427.7	2684.7	2450.9	1996.3	2122.0	1811.8
65°	2056.0	2067.3	2190.0	2489.8	2751.6	2795.3	2956.6	2543.0	1955.9	1950.9	1475.2
67.5°	1873.0	1891.4	2096.7	2873.1	3306.5	3355.3	3285.2	2561.2	1781.4	1517.1	962.4
70°	1632.9	1639.5	1886.4	3217.8	3949.2	3998.5	3579.3	2361.8	1351.9	846.1	431.1
72.5°	1275.2	1276.7	1566.4	3297.6	4298.0	4300.7	3348.5	1753.3	727.0	325.0	149.8
75°	910.9	902.0	1049.1	2674.3	3781.3	3811.7	2510.3	822.5	277.8	153.6	74.6
77.5°	488.4	498.3	593.7	1586.0	2612.2	2663.9	1369.7	237.1	141.4	104.6	49.3
80°	151.0	159.3	243.3	726.1	1479.6	1510.8	507.8	105.5	98.6	74.6	32.4
82.5°	47.6	49.3	113.5	305.1	614.2	628.4	147.1	59.8	67.4	49.3	19.1
85°	13.6	13.9	50.5	113.8	151.8	154.8	41.3	23.2	38.6	30.6	9.8
87.5°	1.4	4.7	19.1	19.1	13.3	13.1	4.4	5.0	11.0	3.9	1.7
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°	587.7	587.7	587.7	587.7	587.7	587.7	587.7	587.7	587.7	587.7	587.7
2.5°	588.9	589.2	585.3	578.8	571.6	565.7	558.3	552.4	548.2	546.9	549.1
5°	593.1	590.9	579.9	560.1	536.3	515.8	492.9	474.8	462.9	457.9	459.6
7.5°	599.3	593.4	569.3	530.0	484.6	444.2	403.1	371.4	351.2	341.1	342.6
10°	604.6	592.8	551.4	486.7	417.2	356.0	300.6	262.4	241.0	230.8	231.1
12.5°	609.7	592.4	528.3	435.3	341.1	266.2	214.8	195.8	189.8	187.8	187.2
15°	619.2	593.4	499.2	376.5	265.4	201.1	182.4	182.1	183.3	182.8	182.4
17.5°	632.2	594.2	466.2	314.1	204.7	177.4	176.5	179.2	180.9	180.1	179.8
20°	649.2	597.8	431.1	252.3	175.9	171.5	173.5	175.9	177.4	175.9	175.6
22.5°	672.9	604.0	392.8	202.6	166.7	167.9	169.6	172.3	173.8	171.7	171.5
25°	702.1	613.9	355.1	176.2	162.3	163.7	166.4	169.3	171.2	169.0	168.7
27.5°	739.8	629.6	320.3	170.3	157.7	158.7	162.6	167.0	169.3	166.7	166.7
30°	794.5	655.4	290.3	172.9	155.1	153.0	158.4	164.6	167.3	164.9	164.6
32.5°	866.9	692.0	271.8	177.1	154.0	146.5	151.5	159.6	164.0	162.6	162.6
35°	962.1	747.5	264.8	181.8	153.0	139.6	143.2	151.8	159.6	161.0	161.0
37.5°	1077.4	824.8	266.8	183.9	150.4	134.0	135.8	143.2	153.3	158.1	159.3
40°	1208.4	914.8	278.7	181.8	147.4	129.3	129.6	135.2	144.1	151.2	153.6
42.5°	1343.6	1020.0	300.6	174.1	144.7	125.0	124.2	128.0	134.0	139.1	141.1
45°	1472.2	1128.1	322.4	163.4	141.4	121.0	118.8	120.3	121.6	123.6	124.7
47.5°	1584.5	1204.2	316.1	153.6	136.9	116.1	112.6	112.0	108.4	108.1	107.8
50°	1662.0	1220.9	280.7	143.8	130.5	110.8	105.2	101.6	95.3	92.4	92.7
52.5°	1686.7	1155.2	229.4	134.0	119.7	103.7	95.6	90.0	82.3	79.6	79.3
55°	1654.0	1026.5	183.3	122.1	104.9	94.2	85.3	77.8	71.6	68.4	68.4
57.5°	1574.1	862.8	145.0	108.1	89.2	83.5	74.6	67.1	61.8	58.5	57.9
60°	1441.6	685.1	114.7	91.5	76.1	71.9	62.7	57.9	53.2	49.3	48.4
62.5°	1240.5	489.0	90.0	72.5	63.6	58.8	53.5	49.9	44.3	38.9	38.0
65°	968.0	299.2	69.5	53.2	51.1	48.7	45.4	42.2	35.4	30.0	29.1
67.5°	610.6	141.8	49.6	40.1	40.4	39.3	37.7	35.1	30.0	25.2	24.7
70°	268.9	68.7	32.7	30.6	30.0	30.0	31.2	30.3	25.5	21.1	20.2
72.5°	91.5	36.8	24.4	23.2	21.7	21.4	26.1	25.2	20.5	16.3	15.5
75°	47.9	24.7	17.8	16.6	13.1	15.8	20.8	19.6	14.6	10.7	9.8
77.5°	31.2	17.5	12.2	10.7	7.4	10.4	15.5	13.6	8.6	5.3	4.7
80°	19.6	11.6	7.2	5.0	3.6	5.6	8.3	5.9	3.3	1.2	0.9
82.5°	10.4	5.9	2.7	1.7	1.4	1.7	2.0	1.4	0.6	0.0	0.0
85°	4.2	2.0	0.9	0.6	0.3	0.0	0.6	0.3	0.0	0.0	0.0
87.5°	1.4	0.3	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)