

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: McGRAW-EDISON

Report Number: P833546

Luminaire Tested: **TTN-D2-735-U-WQ-SG-UPL2**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833546
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (G3-2308-121-4) AND
Test Lab: INNOVATION CENTER
Issue Date: 5/15/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TTN-D2-735-U-WQ-SG-UPL2
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3500K, 70 CRI LEDS AND WIDE DISTRIBUTION WITH SOLITE GLASS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5208.8 lumens
Efficiency: N/A
Efficacy: 110.8 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type V - Short
BUG Rating: B2 - U4 - G1

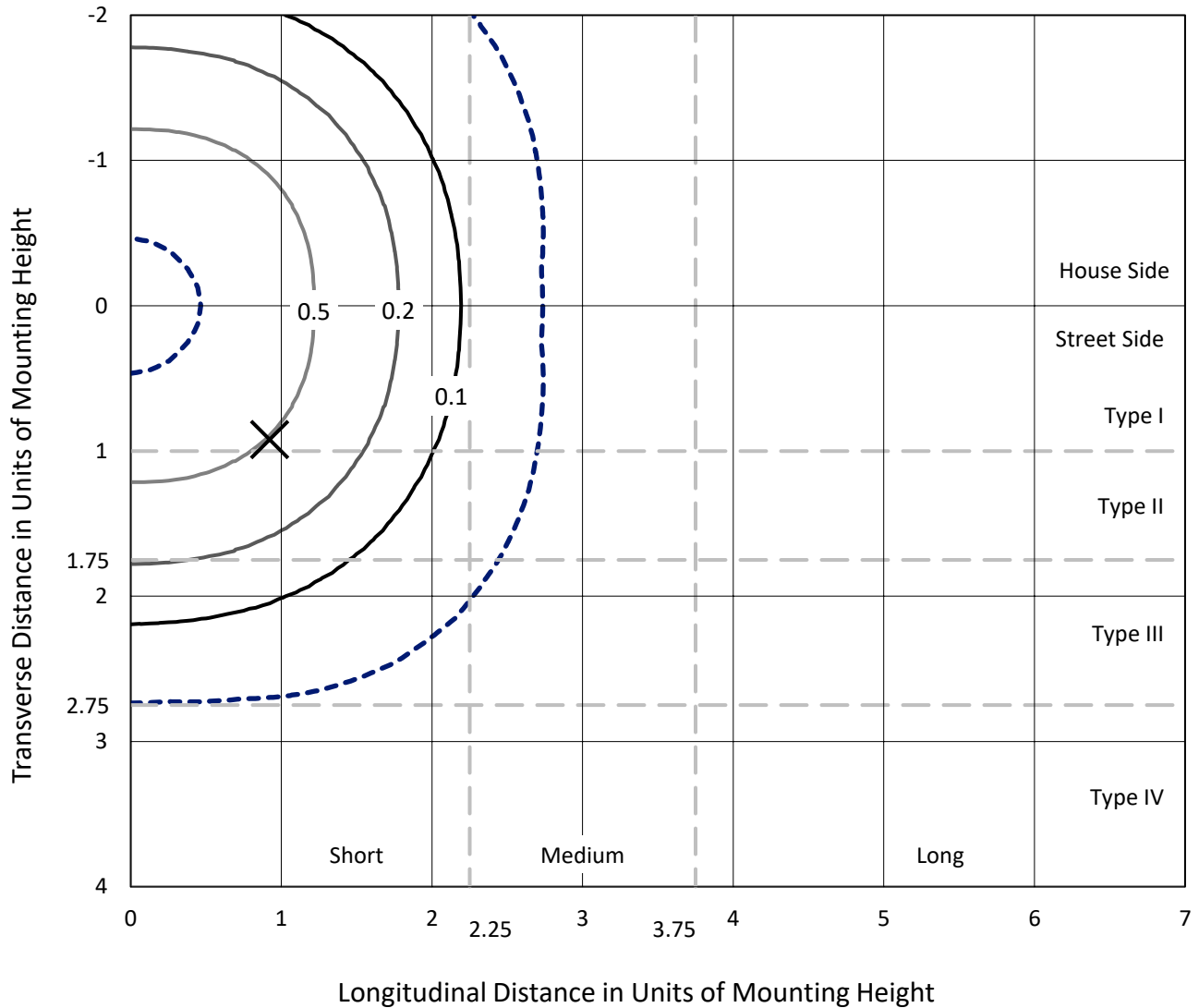
Input Watts (W): 47
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

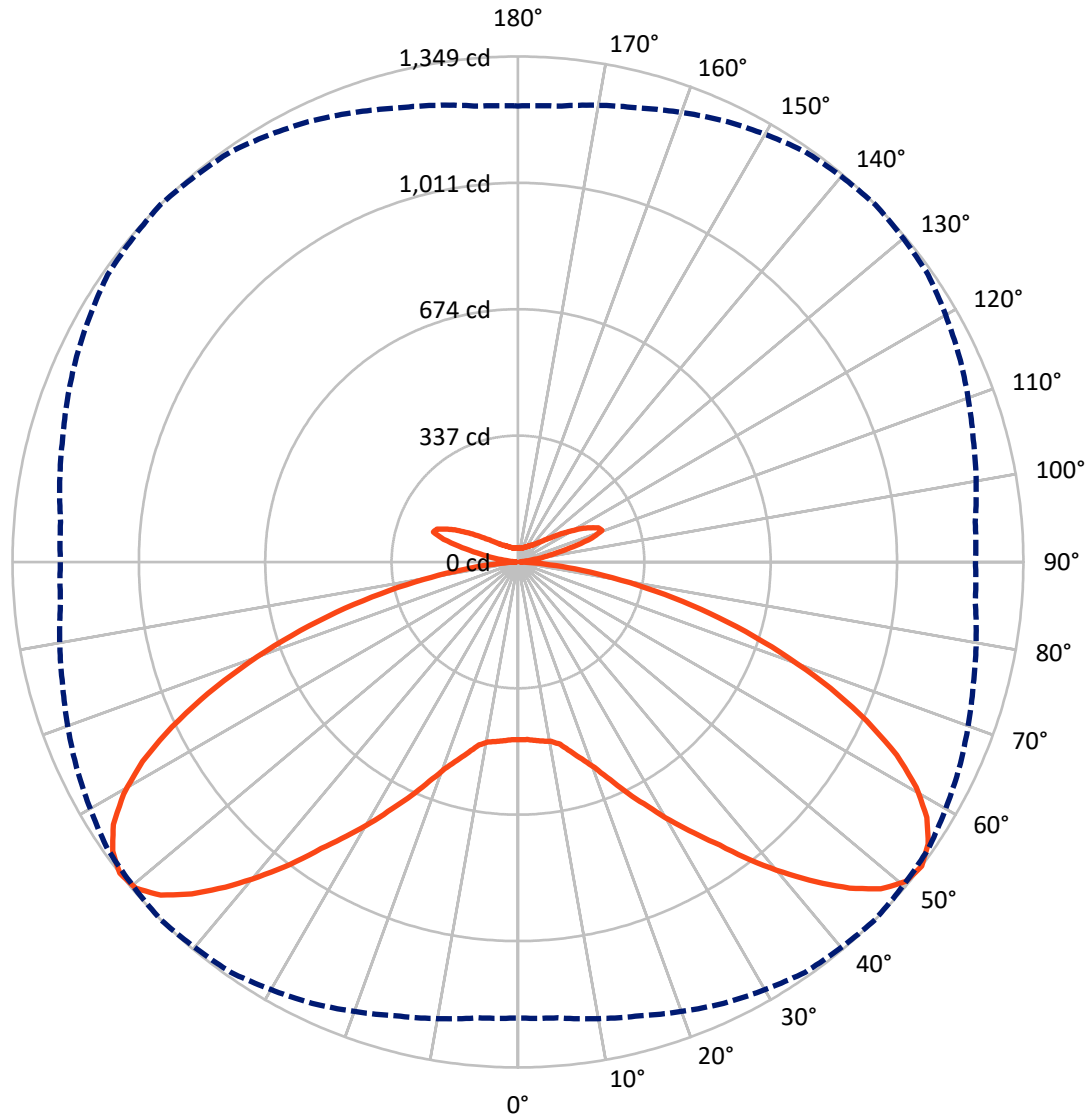
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.8 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 52.5-Deg Vertical

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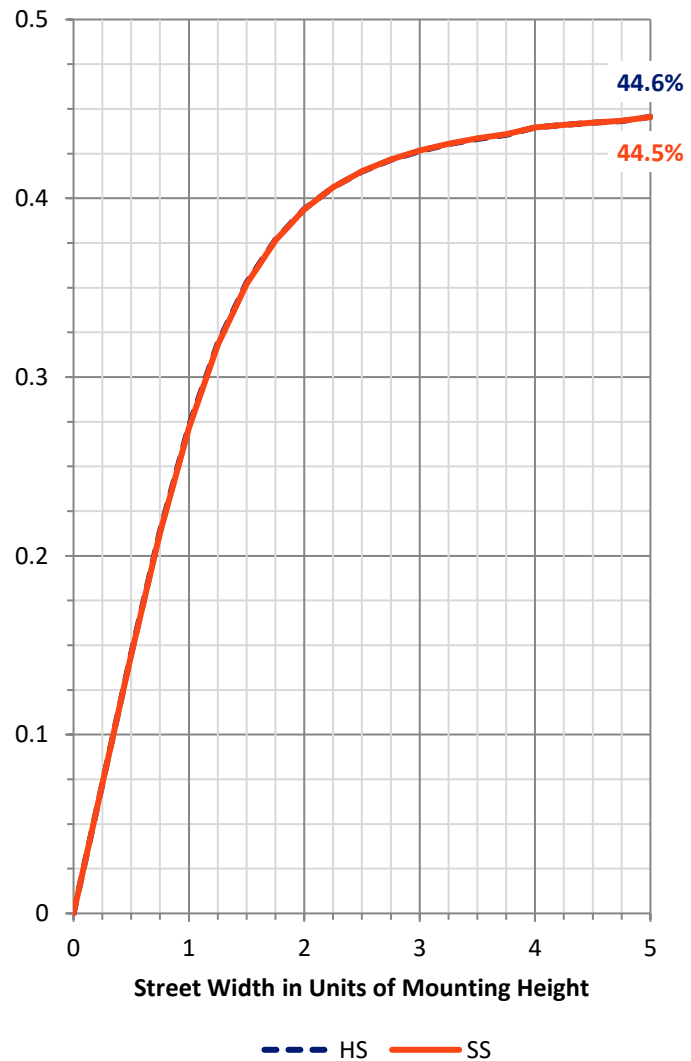
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2332.9	271.5	2604.4
	% Fixture	44.8	5.2	50.0
Street Side	Lumens	2332.9	271.5	2604.4
	% Fixture	44.8	5.2	50.0
Total	Lumens	4665.7	543.0	5208.8
	% Fixture	89.6	10.4	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.8	0.9
10°-20°	150.5	2.9
20°-30°	317.7	6.1
30°-40°	580.4	11.1
40°-50°	923.9	17.7
50°-60°	1117.2	21.4
60°-70°	939.4	18.0
70°-80°	497.9	9.6
80°-90°	92.9	1.8
90°-100°	12.1	0.2
100°-110°	123.2	2.4
110°-120°	180.1	3.5
120°-130°	104.5	2.0
130°-140°	55.4	1.1
140°-150°	32.9	0.6
150°-160°	20.2	0.4
160°-170°	11.0	0.2
170°-180°	3.6	0.1
0°-90°	4665.7	89.6
0°-180°	5208.8	100.0

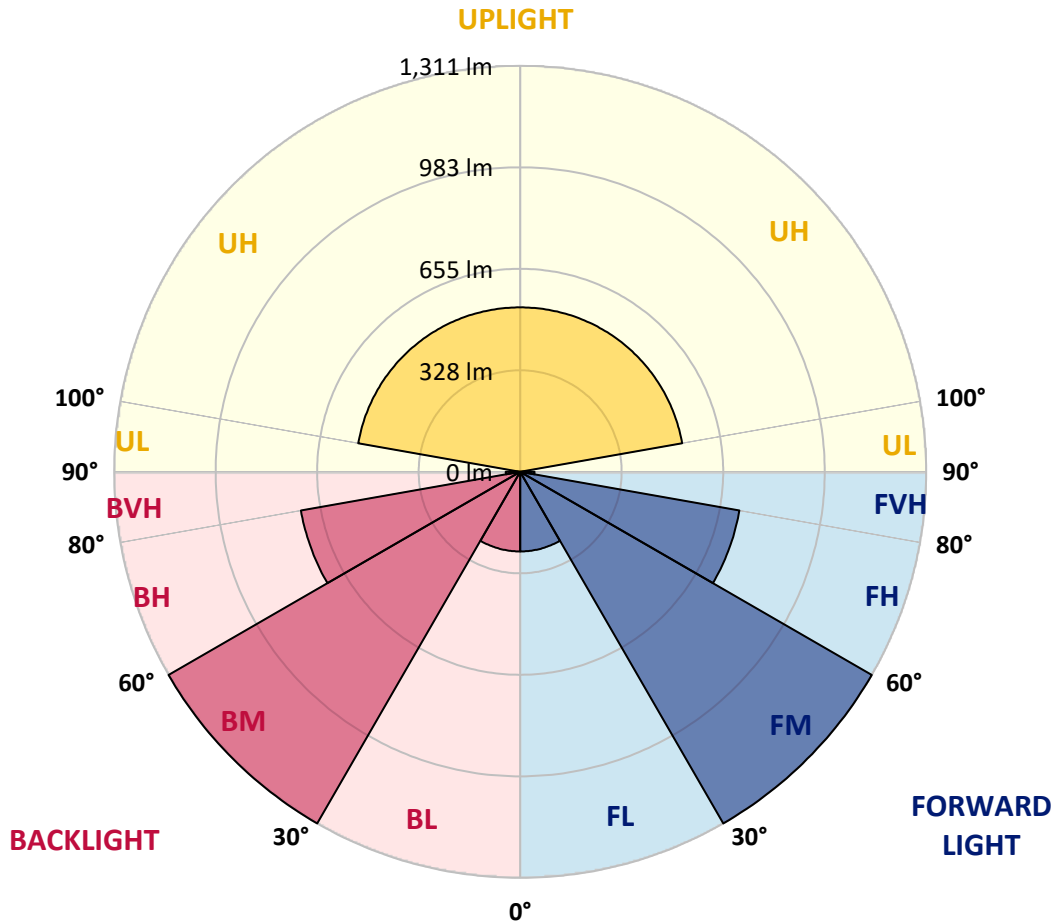


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	257.0	4.9			
FM (30°-60°)	1310.7	25.2			
FH (60°-80°)	718.7	13.8			G1/1800
FVH (80°-90°)	46.4	0.9			G1/100
BL (0°-30°)	257.0	4.9	B1/500		
BM (30°-60°)	1310.7	25.2	B2/2500		
BH (60°-80°)	718.7	13.8	B2/1000		G1/1800
BVH (80°-90°)	46.4	0.9			G1/100
UL (90°-100°)	12.1	0.2		U2/50	
UH (100°-180°)	530.9	10.2		U4/1000	

BUG Rating: B2-U4-G1
 Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	474.3	474.3	474.3	474.3	474.3	474.3	474.3	474.3	474.3	474.3	474.3
2.5°	474.3	474.3	474.3	474.3	474.3	474.3	474.3	474.3	474.3	474.3	474.3
5°	478.4	478.4	474.3	478.4	478.4	478.4	478.4	478.4	478.4	478.4	478.4
7.5°	478.4	478.4	478.4	482.5	482.5	482.5	482.5	478.4	478.4	478.4	478.4
10°	486.7	486.7	486.7	486.7	486.7	486.7	486.7	486.7	486.7	486.7	486.7
12.5°	499.0	499.0	499.0	499.0	499.0	499.0	499.0	499.0	499.0	499.0	499.0
15°	519.6	519.6	519.6	519.6	523.8	523.8	523.8	519.6	519.6	519.6	519.6
17.5°	544.4	544.4	548.5	548.5	552.6	552.6	552.6	548.5	544.4	548.5	544.4
20°	581.5	581.5	581.5	585.6	589.8	589.8	589.8	581.5	581.5	581.5	581.5
22.5°	622.7	622.7	622.7	626.9	631.0	631.0	631.0	622.7	622.7	622.7	622.7
25°	672.2	672.2	672.2	676.4	680.5	684.6	684.6	676.4	672.2	672.2	668.1
27.5°	721.7	721.7	730.0	734.1	738.2	738.2	738.2	730.0	725.9	725.9	725.9
30°	779.5	779.5	787.7	791.8	800.1	800.1	800.1	787.7	783.6	779.5	779.5
32.5°	833.1	837.2	845.5	853.7	861.9	861.9	866.1	849.6	841.3	837.2	837.2
35°	890.8	894.9	903.2	915.6	923.8	927.9	932.1	915.6	903.2	899.1	899.1
37.5°	956.8	960.9	973.3	985.7	1002.2	1010.4	1014.5	989.8	969.2	960.9	960.9
40°	1031.0	1035.2	1047.5	1064.0	1080.5	1088.8	1092.9	1068.2	1047.5	1039.3	1035.2
42.5°	1092.9	1101.2	1113.5	1138.3	1154.8	1167.1	1167.1	1138.3	1113.5	1101.2	1101.2
45°	1150.6	1158.9	1179.5	1204.3	1229.0	1241.4	1237.2	1208.4	1179.5	1163.0	1158.9
47.5°	1196.0	1204.3	1229.0	1257.9	1290.9	1303.2	1299.1	1266.1	1229.0	1208.4	1204.3
50°	1220.8	1224.9	1253.7	1295.0	1328.0	1340.4	1332.1	1299.1	1257.9	1229.0	1224.9
52.5°	1216.6	1220.8	1253.7	1299.1	1336.2	1348.6	1336.2	1299.1	1257.9	1224.9	1220.8
55°	1191.9	1196.0	1229.0	1278.5	1315.6	1328.0	1315.6	1278.5	1233.1	1200.1	1196.0
57.5°	1146.5	1150.6	1183.6	1233.1	1274.4	1286.7	1270.2	1229.0	1183.6	1150.6	1150.6
60°	1080.5	1084.7	1117.6	1171.3	1208.4	1220.8	1200.1	1167.1	1121.8	1084.7	1080.5
62.5°	993.9	993.9	1031.0	1084.7	1117.6	1134.1	1113.5	1076.4	1035.2	993.9	998.0
65°	890.8	886.7	923.8	973.3	1010.4	1022.8	1002.2	969.2	927.9	890.8	890.8
67.5°	783.6	783.6	812.5	853.7	886.7	899.1	878.4	849.6	816.6	783.6	783.6
70°	668.1	668.1	688.7	730.0	758.8	767.1	754.7	725.9	697.0	668.1	668.1
72.5°	552.6	548.5	569.1	602.1	626.9	635.1	622.7	606.3	573.3	552.6	552.6
75°	437.2	433.0	445.4	474.3	494.9	503.1	490.8	478.4	453.7	437.2	437.2
77.5°	325.8	321.7	334.1	358.8	371.2	375.3	367.1	358.8	338.2	325.8	325.8
80°	222.7	218.6	226.8	243.3	255.7	255.7	251.6	247.4	231.0	222.7	226.8
82.5°	132.0	127.8	136.1	148.5	156.7	152.6	152.6	148.5	136.1	132.0	132.0
85°	57.7	53.6	57.7	66.0	74.2	70.1	70.1	70.1	61.9	57.7	57.7
87.5°	8.2	8.2	8.2	12.4	16.5	12.4	12.4	12.4	8.2	8.2	8.2
90°	4.6	4.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	4.6	4.6
92.5°	4.6	4.6	4.6	6.5	7.4	6.5	7.4	5.6	5.6	4.6	4.6
95°	5.6	5.6	6.5	8.4	10.2	11.1	11.1	6.5	6.5	5.6	5.6
97.5°	7.4	8.4	8.4	10.2	16.7	30.7	18.6	9.3	9.3	8.4	7.4
100°	12.1	13.0	13.0	23.2	49.2	66.0	47.4	24.2	17.7	13.0	13.0
102.5°	39.0	40.9	50.2	75.3	111.5	101.3	85.5	80.8	55.7	44.6	42.7
105°	99.4	98.5	105.9	125.4	156.1	153.3	141.2	128.2	110.6	102.2	102.2
107.5°	131.0	131.0	137.5	154.2	177.4	207.2	210.0	166.3	145.9	136.6	135.6
110°	147.7	147.7	153.3	167.2	197.9	239.7	237.8	205.3	180.2	168.2	166.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	151.4	152.4	159.8	181.2	214.6	233.2	224.8	211.8	200.7	191.4	189.5
115°	157.0	157.0	165.4	185.8	204.4	211.8	202.5	192.3	184.9	181.2	183.0
117.5°	155.1	157.9	159.8	170.9	183.0	188.6	183.9	170.0	164.4	162.6	159.8
120°	144.0	144.0	145.9	151.4	157.9	160.7	158.9	149.6	144.9	144.0	142.1
122.5°	128.2	129.1	128.2	131.0	135.6	138.4	136.6	129.1	127.3	127.3	125.4
125°	112.4	112.4	111.5	113.3	116.1	115.2	116.1	112.4	111.5	111.5	110.6
127.5°	101.3	100.3	98.5	99.4	100.3	100.3	101.3	97.5	98.5	99.4	98.5
130°	90.1	90.1	88.3	88.3	88.3	86.4	88.3	86.4	87.3	88.3	89.2
132.5°	79.9	79.9	77.1	76.2	76.2	76.2	77.1	76.2	78.0	79.9	79.9
135°	71.5	71.5	68.7	69.7	69.7	68.7	69.7	68.7	70.6	71.5	71.5
137.5°	65.0	65.0	63.2	63.2	63.2	62.2	63.2	63.2	64.1	66.0	66.9
140°	59.5	59.5	58.5	58.5	57.6	58.5	58.5	58.5	59.5	60.4	60.4
142.5°	56.7	55.7	54.8	53.9	54.8	54.8	54.8	53.9	54.8	56.7	56.7
145°	52.0	52.0	51.1	51.1	51.1	52.0	51.1	51.1	52.0	52.0	53.0
147.5°	49.2	49.2	48.3	49.2	49.2	49.2	49.2	48.3	49.2	49.2	50.2
150°	48.3	47.4	46.5	47.4	47.4	46.5	46.5	46.5	46.5	47.4	47.4
152.5°	45.5	45.5	44.6	45.5	44.6	44.6	44.6	44.6	44.6	45.5	46.5
155°	43.7	43.7	42.7	43.7	43.7	43.7	43.7	43.7	43.7	43.7	43.7
157.5°	41.8	42.7	41.8	41.8	41.8	41.8	41.8	41.8	41.8	42.7	42.7
160°	40.9	40.9	40.9	40.9	39.9	39.9	39.9	40.9	40.9	40.9	41.8
162.5°	39.9	39.9	39.9	39.9	39.0	39.0	39.0	39.0	39.9	39.9	40.9
165°	39.9	39.0	39.0	39.0	38.1	38.1	38.1	38.1	39.0	39.9	39.0
167.5°	38.1	38.1	38.1	38.1	38.1	37.2	37.2	38.1	38.1	38.1	39.0
170°	38.1	38.1	37.2	37.2	37.2	37.2	37.2	37.2	37.2	37.2	38.1
172.5°	38.1	38.1	38.1	38.1	37.2	37.2	37.2	37.2	37.2	38.1	38.1
175°	38.1	38.1	38.1	38.1	37.2	37.2	37.2	38.1	38.1	38.1	37.2
177.5°	38.1	38.1	38.1	38.1	37.2	38.1	38.1	38.1	38.1	38.1	38.1
180°	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1

(END OF REPORT)